





MADE AND PRINTED IN GREAT BRITAIN

ROBERT, LORD CLIVE

By SIR NATHANIEL DANCE

From the Collection of the Earl of Powis in Berkeley Square

INDIA

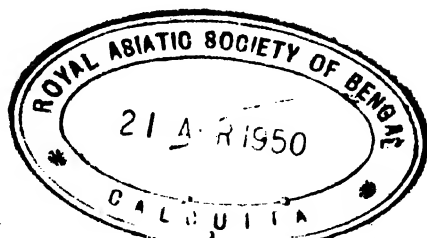
A Reprint of
THE SPECIAL INDIA NUMBER
of

The Times

FEBRUARY 18, 1930

SIR. C. C. GHOSE, COLLECTION
THE ASIATIC SOCIETY
CALCUTTA

THE TIMES PUBLISHING COMPANY LTD
PRINTING HOUSE SQUARE
MARCH MCMXXX



27613.

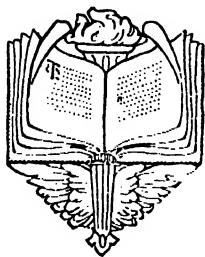
INTRODUCTION

THE present volume is a reproduction, in more permanent and portable form, of the Special India Number of *The Times* which appeared on February 18, 1930. The Number itself was projected more than a year ago. It was believed at that time—with what accuracy recent events have shown—that the year 1930 would find public opinion in England more deeply concerned with Indian problems than at any time for half a century; that the Report of the Statutory Commission, which is due within the next month or two, would be the better understood by English readers for a general account beforehand of various phases of life in India; and that there was occasion also, at a time when it is the fashion in some quarters to disparage the British connexion, to recall some of the great achievements in the moral and material development of the country for which it is responsible. With these objects in view the articles reprinted in the present volume gradually took shape. It does not profess to be either uniform or exhaustive. A collection of newspaper articles, in which the writers, all experts in their own subjects, have been given a free hand to treat them in their own fashion, can never possess the completeness or the proportions of the work of a single author. Nevertheless there are certain compensating advantages in variety—the more so since disputable topics have so far as possible been avoided. The whole character of the volume, as its readers will find, is historical and descriptive rather than controversial.

The project has the blessing of the Viceroy, and includes among its contributors a large body of distinguished administrators, past and present, British and Indian. In some cases their contributions are signed; in other cases they prefer for various reasons to remain anonymous. Special attention may perhaps be drawn, among the former, to the masterly sketch of British administration in India during the past 150 years which comes from the pen of Lord Zetland, who is still better known for his work and writings in Bengal as Lord Ronaldshay;

INTRODUCTION

to Sir Harcourt Butler's account of his Committee on the Indian States, of which Sir Walter Lawrence describes the miscellaneous races and scenery; and to the articles of such acknowledged authorities in their own spheres, to name no others, as Sir William Marris, Sir Herbert Baker, Lord Inchcape, and Miss Cornelia Sorabji. There is a special and melancholy interest in the fact that these pages contain the last work of two distinguished contributors—Sir Valentine Chirol, who had written so much in *The Times* on Indian affairs, and Colonel Faunthorpe, the well-known *shikari*; in both cases their articles reached Printing House-square after their death. For the rest the reader will find abundant and recent information about the structure of the Government, the complicated and important land revenue system, the public services, the great cities, the railways and shipping, the agriculture and manufactures, the antiquities, the literature, the daily life and sports and pastimes of India. Finally *The Times* took the opportunity to repeat an experiment which was a popular feature of the recent Printing Number and presented to its readers on February 18 a separate reproduction in colour of the best-known portraits of Clive and Warren Hastings, the two great founders of the Indian Empire in the eighteenth century. Both these portraits, with many other illustrations, reappear in the present volume.



MESSAGE FROM THE VICEROY

I welcome the action of *The Times* in devoting a Special Number to the Indian Empire.

Appearing as it does at so important a stage in our history, the Number will have a twofold value. It will serve to give the British people a picture of the India of their time, and remind them of the part that their countrymen have played in helping to build its present greatness. It will also give the people of India some idea of the interest with which the British public is watching the development of the many and difficult problems that confront them, and that are now pressing for solution.

The romance of Indian history, adorned as it is with great names and gallant deeds, is perhaps comparatively familiar. There is, however, at this juncture need for a knowledge, not only of past effort, but of present purpose, since only from such firm foundation of knowledge can true sympathy and understanding spring.

For this reason alone I look on the story that is told by the contributors to the following pages as a service rendered not only to readers of *The Times*, but to all who love India and wish to guide her steps aright.



ACKNOWLEDGMENTS

Some of the pictures in this Book are published by the courtesy of the Department of Public Information and the State Railways Publicity Bureau of India. We are also indebted to the Director of the Imperial Institute, South Kensington, for the loan of photographs from the Public Exhibition Galleries, where there is a Court and Cinema illustrating the scenery, products, and life of the people of India open free daily to the public.

CONTENTS

	PAGE
Introduction	v
Message from the Viceroy	vii
List of Illustrations.. .. .	xvii

PART I

THE PAST AND THE FUTURE

CHAPTER I

THE BRITISH ACHIEVEMENT

Relations between Great Britain and India—Moghul Rule—East India Company—Native States—British Administration—Peace, Order and Prosperity—Development—Industries—Irrigation Works—Illiteracy—Education—Pestilence and Famine *page 3*

CHAPTER II

THE STATUTORY COMMISSION

Government Decision to expedite Appointment—Personnel—Boycott—Visit to India—Evidence taken in London—Second Visit to India—Attitude of Princes—Lord Irwin's Statement *page 13*

CHAPTER III

THE INDIAN STATES AND THE CROWN

Right of Intervention—Administration—Chamber of Princes—Harcourt Butler Committee—Closer Union *page 19*

CHAPTER IV

THE NATIONALIST MOVEMENT

All-India National Congress—Political Aspirations—Pioneers—Morley-Minto Reforms—Montagu-Chelmsford Reforms—Non-cooperation—Swaraj—Goal of Complete Independence *page 23*

CONTENTS

PART II GOVERNMENT AND FINANCE

CHAPTER I

THE CENTRAL AND PROVINCIAL GOVERNMENTS
Governor-General's Responsibility—Provincial Powers—Lord Curzon's
Scheme of Government—Morley-Minto Reforms—Montagu-Chelmsford
Reforms *page 29*

CHAPTER II

FINANCIAL ADMINISTRATION
Historical Development—Decentralization—Meston Settlement—Re-
sponsibility of Central Government—Financial Position of Provinces—
Railway Budget—Military Expenditure—Debt Position—Prices of
Government Securities *page 37*

CHAPTER III

THE LAND REVENUE SYSTEM
Assessment and Settlement—Annual Land Revenue *page 45*

CHAPTER IV

THE DISTRICT OFFICER
Life and Duties—Administrative Powers *page 49*

PART III THE DEFENCE FORCES

CHAPTER I

THE INDIAN ARMY
Composition—Auxiliary Force—States Forces—War Services—Trans-
port—Characteristics of Races *page 55*

CHAPTER II

THE ROYAL INDIAN MARINE
History—War Services—Personnel *page 63*

CHAPTER III

ROYAL AIR FORCE
Strength—Activities—Kabul Rescues—Indian Air Force *page 65*

CONTENTS

PART IV

ADMINISTRATIVE SERVICES

CHAPTER I

AGRICULTURAL RESEARCH

Cultivated Area—Livestock—Statistics—Diversity of Cropping—Dependence on Monsoon—Strains of Seeds—Animal Diseases—Research College *page 71*

CHAPTER II

STATE IRRIGATION WORKS

Rainfall—Artificial Storage—Perennial Systems—Sutlej Valley Scheme—Sukkur Barrage Scheme—Acreage Irrigated—Finance *page 77*

CHAPTER III

FORESTS AND TIMBERS

Forest Department—Species of Timber—Policy *page 81*

CHAPTER IV

THE POST AND TELEGRAPH SERVICES

Introduction of Postage Stamps—Statistics—Efficiency—Money Order System—C.O.D. System—Telegraph and Telephone Services *page 87*

CHAPTER V

THE INDIAN POLICE SYSTEM

Moghul System—British Supervision—Organization—Finger Print *page 91*

CHAPTER VI

THE INDIAN MEDICAL SERVICE

Development—War Requirements—Skill of Early Surgeons *page 94*

CONTENTS

PART V THE PEOPLES OF INDIA

CHAPTER I

HINDUISM AND ISLAM

Structure of Hindu Society—Advantage of Western Education—Mohamedan Attitude—Anglo-Mohamedan College—All-India Moslem League—Hindu and Mohamedan Antagonism *page 99*

CHAPTER II

THE CASTE SYSTEM

Origin of Caste—Four Great Castes—Rules—Precedence of Major Castes—Depressed Classes—Arya Somaj—Sikhs—Hinduism—Aboriginal and Half-Civilized Tribes *page 105*

CHAPTER III

THE POSITION OF WOMEN

Emancipation—University Degrees—Bar Degrees—Literature—Franchise—Education—The Purdah System *page 113*

CHAPTER IV

THE CHRISTIAN CHURCH

Growth of Christian Community—Missionary Work—Religious Societies—Scheme of Union *page 117*

CHAPTER V

THE SYSTEM OF EDUCATION

Western Ideas—Development—Illiteracy—Compulsory School Attendance—Universities—Technical Education—Agricultural Schools—Girl Students—Mission Institutions *page 123*

CHAPTER VI

MODERN INDIAN LITERATURE

Literary Activity—Effect of Illiteracy—Influences—Bengali and Marathi Literatures—Drama *page 129*

CHAPTER VII

AN INDIAN VILLAGE

Description of Life—Hearth and Home—Land Folk and Craftsmen—The Village Priest *page 133*

CONTENTS

PART VI THE INDIAN PENINSULA

CHAPTER I

A LAND OF MANY CONTRASTS

Ethnology—The Great Plains—The Deccan—Southern India *page 141*

CHAPTER II

THE INDIAN STATES

General Survey—Princes and Peoples—Indian Life—Legends of Chivalry *page 147*

CHAPTER III

THE NORTH-WEST FRONTIER

General Survey—"Forward" School—Frontier Policy—Border Rectification *page 155*

CHAPTER IV

DELHI, OLD AND NEW

Historical—New Delhi—Health Problems *page 159*

CHAPTER V

THE ARCHITECTURE OF NEW DELHI

Difficulties Overcome—Secretariat Building—Viceroy House—Council House—Indian Workmanship *page 163*

CHAPTER VI

CALCUTTA

Population—Modern Buildings—Jute Trade—Victoria Memorial—Improvement Trust *page 171*

CHAPTER VII

BOMBAY

Physical Changes—Improvement Trust—Port—Cotton Trade—University *page 175*

CONTENTS

CHAPTER VIII

THE CITY OF MADRAS

Fort St. George—Principal Buildings—Development—Port Traffic—
Irrigation Works—Railway Reconstruction *page 177*

CHAPTER IX

SIMLA

Summer Seat of Government—The Season—Holiday Attractions *page 181*

CHAPTER X

KARACHI

Development—Trade—Seaport and Airport *page 185*

CHAPTER XI

THE VALLEY OF KASHMIR

Scenic Beauty—The People of Kashmir—Government *page 189*

CHAPTER XII

BURMA AND THE BURMANS

Characteristics—Pacification—Prosperity—Separation Question *page 193*

PART VII

THE MONUMENTS OF INDIA

CHAPTER I

TEMPLES, MOSQUES, AND PALACES

Buddhist Architecture—Hindu Temples—The Taj—Mosque of
Aurangzeb—Moslem Building *page 199*

CHAPTER II

EXPLORATION OF ANCIENT SITES

Monumental Antiquities—Archæological Survey—Buried Cities—
Explorations—Organization of Museums—Epigraphical Discoveries *page 207*

CHAPTER III

HISTORIC PLACES OF THE MUTINY

Lucknow—Delhi—Meerut—Cawnpore *page 211*

CONTENTS

PART VIII RAILWAYS AND ROADS

CHAPTER I

THE RAILWAYS

Mileage—Traffic—Effect on Irrigation Schemes—Staff—Staff College—
Classification—Railway Board—Contributions to Revenue *page 219*

CHAPTER II

RAILWAY ENGINEERING

Crossing the Ghats—Gauges—Gradients—Bridging—Viaducts—Tunnels
page 223

CHAPTER III

STANDARDIZATION OF ROLLING STOCK

Development of Scheme—Reform of Workshop Practice—Repair of Locomotives, Coaches and Wagons *page 227*

CHAPTER IV

TOURS BY RAILWAY

Touring Season—Itinerary *page 231*

CHAPTER V

TRUNK AND MAIN ROADS

Development—Mileage—Upkeep—Motor Transport *page 235*

PART IX

EMPIRE COMMUNICATIONS

CHAPTER I

BRITISH SHIPPING SERVICES

Lines Engaged—History of Expansion—Government Contracts—Coastal Transport *page 241*

CHAPTER II

THE AIR ROUTE TO INDIA

Description of Journey from Croydon to Karachi *page 247*

CONTENTS

PART X TRADE AND INDUSTRY

CHAPTER I

EXPORT AND IMPORT TRADE

Productivity—Value—Cotton Goods—Iron and Steel—Railway Rolling Stock—Trade with other Countries—Motor Vehicles—Jute—Food Grains and Flour—Tea—Ores and Metals *page 253*

CHAPTER II

INDUSTRIAL LIFE

Migratory Labour—Factory Legislation—Child Labour—Hours of Mill-hands—Workmen's Compensation—Trade Unions—Arbitration *page 261*

CHAPTER III

NATIVE ARTS AND CRAFTS

Handicrafts—Cotton Manufactures—Silk Weaving—Metal Industries—Ivory Work—Lacquer Work—Pottery *page 265*

PART XI SPORT

CHAPTER I

SHIKAR

Big and Small Game—Outfit—Preservation of Wild Life *page 271*

CHAPTER II

THE HORSE

Pig-sticking and Hunting—Polo—Racing—Horse Breeding *page 279*

CHAPTER III

CRICKET

Quadrangular Matches—Bombay Festival—Indian Team—Enthusiasm of Ruling Princes *page 285*

LIST OF ILLUSTRATIONS

	PAGE
Portrait in colour of Lord Clive	<i>facing title page</i>
Portrait in colour of Warren Hastings	<i>facing page 1</i>
Map of India	<i>facing page 141</i>
The Statutory Commission	12
The Maharajah of Mysore at the Dassara Festival, 1929	18
Lord Irwin, Viceroy of India	26
Lady Irwin	32
The Legislative Chamber at Delhi	36
Government House, Calcutta	44
Landi Khana, the terminus of the Khyber Pass railway, and the last British post before the Afghan border is reached	48
Field-Marshal Sir William Birdwood, Commander-in-Chief in India since 1925	52
A Cavalry Patrol in the Khyber Pass	58
Gurkhas on Manœuvres	60
R.I.M. Sloop Clive, Flagship of Rear-Admiral H. Walwyn, C.B., D.S.O., Flag Officer commanding the Royal Indian Marine	62
Air Rescues from Kabul; An R.A.F. machine in the Afghan capital; and arrival of Lady Humphrys, wife of the British Minister, at Peshawar aerodrome	66
Cutting jute in Bengal	72
Gathering the crop in a Darjeeling Tea Garden	75
The Lloyd Barrage at Sukkur, in process of construction	78
The Sutlej Valley Weir	78
An Evergreen Forest in Southern India	82
The new India House in Aldwych, London	84
The General Post Office, Calcutta	86
Types of Indian Police	90

LIST OF ILLUSTRATIONS

	PAGE
A Hindu Festival in the City of Madras	102
A typical crowd of Indians at a railway station	108
Women of Mandu, on the Malwa Plateau	108
Members of the Standing Committee of the All-India Women's Conference ..	112
St. Paul's Cathedral, Calcutta	118
Bombay University Senate Hall and Tower	126
At the well in an Indian Village	134
The Bathing Ghats at Benares	138
The State elephant of the Maharajah of Patiala, Chancellor of the Chamber of Princes	146
The Chár Minár, in the City of Hyderabad	150
The River at Alleppey, Travancore	153
The Fort and encampment at Landi Kotal, near Peshawar	154
The Viceroy's House, New Delhi	160
A panoramic view of New Delhi	164
The Victoria Memorial, Calcutta	170
The Municipal Offices and the Victoria Terminus of the G.I.P. Railway, Bombay	174
The City of Madras	178
Simla, the summer capital of the Government of India	182
Karachi	186
Srinagar, the capital of Kashmir	188
Shrines at the Shiwe Dagon Pagoda, Rangoon	192
The Taj Mahal	196
The Golden Lotus Temple, Madura	200
The Kutb Minar	202
The rock-hewn Kailasa Temple, in the Ellora Caves, Hyderabad State ..	204
The Buddhist site of Nalanda, in Bihar and Orissa	206
The ruins of the Residency at Lucknow, from a photograph taken after the reoccupation of the city in 1858	212
The Punjab Express on its journey from Bombay to Delhi	216
Intermediate stage in the erection of a steel arch across the Raond Nullah, Kangra Valley Railway, Punjab	224

LIST OF ILLUSTRATIONS

	PAGE
The Vishrant Ghat at Muttra, on the Jumna	230
Crossing the Plain to the Kabul river	234
The P. & O. liner Viceroy of India	238
The first England-India Air Mail machine, The City of Jerusalem, leaving the aerodrome at Karachi on April 7, 1929	246
Loading bales of cotton in the port of Bombay	254
An Ivory Carver of Bombay	264
A Hindu Brassworker of Benares.. .. .	266
Lord Irwin, the Viceroy, the Maharajah Kumar and the Maharajah of Mysore, with a tiger shot by the Maharajah Kumar	268
Pig-sticking	278
The M.C.C. Team, 1926-27, versus Aligarh University	284



WARREN HASTINGS

By GEORGE ROMNEY

From the Collection at the India Office

PART I

THE PAST AND THE FUTURE

CHAPTER I

THE BRITISH ACHIEVEMENT

By the MARQUESS OF ZETLAND, G.C.S.I., G.C.I.E.

FOR 150 years and more Great Britain and India have been travelling a common road. On the horizon stands the goal, at first scarcely imagined, but now clearly outlined, towards which their onward march is carrying them. To that goal and to the remaining stages on the road that leads to it public attention will shortly be directed by the Report of the Statutory Commission; and since with the attainment of the goal the crowning act of British statesmanship in the romantic drama of British Indian history will be consummated, we may profitably employ the brief interval that still remains to us before we are called upon to embark upon a fresh advance in taking stock of all that has emerged from the long and intimate contact between these two strangely dissimilar nations. That the relationship between Great Britain and India is unparalleled in history is undeniable. How, then, did it arise? Not, certainly, as the result of any premeditated plan—though a tendency has been observable in the controversies of recent times to attribute our presence there to-day to the prosecution of a policy of deliberate exploitation and aggrandizement. Such ideas are born out of the heat of controversy, and have little basis in fact.

Emerson, viewing the achievements of the British in India with the detachment of an onlooker, arrived at a conclusion the historical accuracy of which is beyond challenge when he declared that the English did not calculate the conquest of India; and it is flattering to our national vanity to suppose that he spoke with equal insight and sincerity when he added that India fell to our character. That the bands of merchant adventurers who sailed round the Cape with charters granted by Queen Elizabeth in 1600, and by William III. in 1698, were inspired by the hope of material gain there is no need to deny. But if commerce had remained the sole motive of the British in India the history of British India would never have been written, for there would have been no British India about which to write it.

It was when the activities of the traders were diverted into other channels that they became the unconscious instruments of a new and wholly unforeseen destiny. They fought—and conquered—only because in no other way could they suppress the disorders which militated against the successful prosecution of their trade. Neither were these disorders due wholly, nor even mainly, to the rivalry of other competing European Powers. They were the inevitable outcome of the decline and fall of the Moghul Empire. Ballads still sung by village bards in the eastern districts of Bengal give a vivid picture of the insecurity of life and property on the confines of the Moghul Empire, even during the halcyon days when Moghul power was at its height; and by the close of the seventeenth century it was already clear that Moghul rule had reached and passed its zenith. The breadth of vision and tolerance of Akbar had given place to the religious bigotry of Aurangzeb; and if, after the latter's death, in 1707, Moghul Sovereigns continued to succeed one another upon a nominally Moghul throne, they passed fitfully across the scene like the figures of a shadow-show, outlined uncertainly against a background of ever-increasing anarchy and confusion. Throughout the eighteenth century India was a prey to all those tyrannies and disorders which have been the invariable experience of Eastern peoples when thrones have wilted and tottered to the dust.

Such, then, were the provocations which led to the imposition of the authority of the East India Company over the Peninsula. Here and there, as the tide of conquest flowed onwards over the land, it left behind it a number of islands, some large, some small, pieces of territory over which the Company did not establish its own direct authority, but which it left to the rule of Native Chiefs, with whom it contracted treaties. In this way there came into existence the Native States, which to-day cover nearly two-fifths of the total area of India and embrace not far short of one-quarter of its population. That the onward march of the Company's victorious troops was often welcomed with greater enthusiasm by the people who submitted to it than by the authorities at Whitehall is not the least striking feature of the gradual consolidation of British rule. It was at the request of a people groaning under tyrannous misrule that Clive fought and won the battle of Plassey, which in its turn led to the assignment of the revenues of Bengal, Bihar and Orissa to the East India Company, which thus acquired for Great Britain, in 1765, the virtual sovereignty of these countries. And the distaste with which the Directors of the Company in London viewed

the extension of their territorial responsibilities which was still in progress three-quarters of a century later is well illustrated by the witty paragraph in *Punch* in 1844, wherein Sir Charles Napier was depicted conveying the news of his conquest of Sind to his superiors by means of a single word, "Peccavi." Viewing these crowded events in the truer perspective which is possible to-day, we can perceive that it was out of them that emerged that reign of peace and order which was the first great gift conferred upon the Indian people by Great Britain. And if she had done no more than this her achievement would have been no mean one.

But if the skill of her military commanders and the courage and perseverance of her troops, both British and Indian, have played their part in laying the foundations of a new and happier India, and have since secured to her peace within her borders and immunity from invasion from without, it is the success of her administrators, both military and civil, in bringing so vast a territory, inhabited by so many and such diverse races, under a just and orderly administration that history will regard as the outstanding achievement of her work in Asia. For it is by the labours of her administrators, her Judges, her educationists, her sanitarians, and her engineers that the contrast between the India of to-day and the India of two centuries ago has been effected. And how remarkable that contrast is! It is scarcely too much to say that to-day there is not an acre of British India—a territory more than a dozen times as large as the United Kingdom—over which the fine-spun web of the Administration has not been cast. From the point of view of the teeming masses of the Indian peasantry that alone is a matter of capital importance; for what does it mean? It means that there is not a field, however small, belonging to the humblest villager, which is not recorded in an official document, and for the possession of which he has not, therefore, that legal security which was so conspicuous for its absence from the picture of the India of two centuries ago. Statistics make heavy reading, but they have their uses, and incidentally they bear witness to the extent of what has been accomplished in evolving order out of chaos, for they are the offspring of orderliness and successful administration.

For anyone who cares to satisfy himself as to the thoroughness of British administration in India there is the Report on the most recent Census, that of 1921—a volume of 300 pages packed with statistical information of every kind. A few figures from a single table at the beginning of the volume will suffice as an example. From this small

introductory table the curious may learn that the area of British India—that is to say, that part of the continent which is administered directly by Great Britain as distinct from the Native States—is 1,094,300 square miles; that it has a population of 247,003,293, composed of 126,872,116 males and 120,131,177 females; that the urban portion of the population lives in 1,561 towns and the rural portion in 498,527 villages; and, finally, that the number of occupied houses in the towns is 5,046,820 and in the villages 45,394,816. These figures bear striking testimony to the work, among others, of the Survey and Settlement Officers, that is to say, those who are responsible for the topographical survey of the country and those whose duty it is to make and maintain a record of all existing rights and responsibilities in land.

But great as the task of these painstaking officials has been, it represents only one aspect of the work of organization for which the British have been responsible. The land has been covered with a network of railways, steadily increasing, and already over 40,000 miles in extent, over which no fewer than 623,000,000 passengers have been carried in the course of a single year. Posts and telegraphs have been set up by whose agency letters are carried expeditiously, and at the cost of a penny only, from one end of this huge area to the other. Immense tracts of desert land have been made fertile by means of some of the greatest irrigation works in the world; and the yield of crops has been enormously increased as the result of scientific agricultural research. Great industries, which have added to the resources of the peasantry, have been built up by British enterprise and with the aid of British capital. The tea industry is a case in point. Nearly 750,000 acres are now under cultivation, producing annually not far short of 400,000,000 lb. of leaf. The value of tea exported amounts to approximately £25,000,000 a year. Even more remarkable are the statistics of the jute industry. While in this case the fibre is cultivated by the peasantry, its manufacture for commercial use is almost entirely in British hands. There are in Calcutta and its neighbourhood 90 mills with over 1,000,000 spindles and 50,000 looms having an authorized capital of £16,000,000, and employing 330,000 hands. Their output in 1927-28 amounted to 463,000,000 gunny bags and 1,552,000,000 yards of gunny cloth, valued at £40,000,000. Some idea of what the creation of this industry has meant to the villagers of Bengal and Assam may be gained by a glance at the extent and value of the crop, which in 1926 amounted to more than 12,000,000 bales, worth in English money over £100,000,000.

Other services which have been rendered to the country include the

establishment of Courts of Law, from village Benches up to the High Courts of Judicature of Calcutta and other provincial capitals, while law itself, both civil and criminal, has been codified and accorded the place of honour which it occupies in all modern civilized States. Schools and universities have been established. Plague, famine, and pestilence have been, and are being, fought. In the field of malarial research the name of Sir Ronald Ross at once occurs to one, while in the School of Tropical Medicine in Calcutta is to be seen a monument to another of India's benefactors in this domain—namely, Sir Leonard Rogers, whose work has been of special value in the treatment of cholera, leprosy, and kala-azar. In the political sphere a system of local self-government both in town and country has been established; and, finally, long strides have already been taken towards the institution of Parliamentary government on a federal basis.

So much, in brief, for British achievement in India. Not the least remarkable feature of the whole vast system of administration is the extent to which it has been manned by an Indian *personnel*. At no time has the British controlling agency—civilians, Judges, engineers, doctors, educationists, police officers, forest officers, agricultural and other experts—exceeded 5,000 men. It has in recent years been appreciably less, and is still in process of diminution. A detailed examination of the various activities for which these men have been responsible would prove both interesting and instructive; but space permits of a closer scrutiny of only a few of them; more particularly as something must be said of the peculiar conditions under which they have been undertaken, if a true view of Great Britain's achievement is to be obtained.

If India had been a small, compact, homogeneous country such as Great Britain herself, or any one of the countries that go to make up the continent of Europe, her achievement would still have been great, though it would have been less remarkable than is actually the case. But in all these respects she is the very antithesis of the British Isles. Where Great Britain is small, India is vast; where Great Britain is compact, India is loosely knit; where Great Britain is homogeneous, India is polygenous and bewilderingly polyglot. From all directions contrasts, contradictions, and diversities stare one in the face. The contrasts in her physical characteristics alone provide intricate problems for solution. The soaking humidity of the south and east, and the awful aridity of the north-west; Cherrapungi, with its annual rainfall of 450 inches, and Jhatput, where rain may be looked for on six days only in a normal year, and where an annual fall of three inches is all that

can be counted on, may be taken as examples. The one provides a problem of overwhelming magnitude for the custodian of the public health; the other for the irrigation engineer. For where water is excessive the problem for solution is its rigorous control, since stagnant pools left on the land with the seasonal recession of the waters provide deadly breeding ground for the malaria-bearing mosquito and other hostile forms of insect life. This is one of the outstanding problems of Bengal. On the other hand, great skill and vast expenditure are required to bring water to the desiccated highlands of the Deccan and the thirsty reaches of the north-west.

Much had already been done by the close of the nineteenth century; but great impetus was given to these as to all other measures designed to improve the lot of the teeming masses of the Indian peasantry by the lofty ambitions and the devouring energy of Lord Curzon. The story of what has been accomplished reads like a romance; and Lord Curzon himself declared that he had found the Report of the Commission on irrigation which he had set up "infinitely more interesting than a novel." The expectations which he based on its recommendations were high, but not unduly so. They were about to embark upon their programme, he told the public in 1905, with the consciousness that they were not merely converting the gifts of Providence to the service of man, but that they were labouring to reduce human suffering and, in times of calamity, to rescue and sustain millions of human lives. As a result huge tracts of sterile land have been converted into granaries. Twenty-eight million acres in British India alone are irrigated by works constructed by the State. Water pours down 67,000 miles of Government canals to raise crops whose estimated value is £105,000,000 a year. And immense projects are still in process of construction. The Sukkur barrage, stretching for a distance of 1,575 yards between the faces of the regulators on either side, will be the greatest work of its kind in the world; the Sutlej Valley project, at a capital cost of approximately £18,000,000, will bring 3,750,000 acres of waste land under cultivation; in the Deccan the Bhandardara dam, 270ft. in height, recently completed, has been instrumental in converting great tracts of desert into prosperous gardens of sugar-cane, while in the same neighbourhood the Lloyd dam—the largest mass of masonry in the world—will hold up a perennial supply of water which will feed a total cultivable area of 675,000 acres. In short, a total area of 40,000,000 acres irrigated by all these great State systems may confidently be said to be in sight.

These few facts give some indication of the problems provided by the

abrupt contrasts in the physical features of the land; it remains to point out that these in their turn have been simple in comparison with those which have arisen out of the diversities of her many-visaged, many-hued, and many-tongued peoples. Within the confines of the continent are to be found representatives of every epoch in human history, from the Stone Age to the twentieth century; and legislation and administration have had to be devised to meet the needs of all of these. And to cultural differences have been added the schisms of religion. If in Europe differences between adherents of a single faith have often baffled statesmanship, it should be easy to imagine the task of an alien ruler confronted with peoples professing the creeds of the innumerable sects of no fewer than nine distinct religions. Religious sanction has sometimes been claimed for customs of immemorial antiquity but of barbarous cruelty. Against such anti-social practices, intimately affecting the religious and social life of the people, the ruler of an alien race and creed has necessarily had to proceed with caution. And if such delicate questions as that of child marriage have not yet reached a permanent solution, much has, nevertheless, been done. The inhuman custom of suttee and the equally heinous practice of infanticide have disappeared, while throughout the public services bribery and corruption are giving way before the higher standards of morality inculcated over a long term of years by precept and by the example of the British *personnel*.

It is often claimed by the detractors of British rule in India that the fact that 229,000,000 of the 248,000,000 inhabitants of British India remain illiterate is a damning proof of failure. Such statistics are misleading, and it would be easy to quote figures on the other side which, taken by themselves, would convey an equally false impression of what has actually been done. The fact could be emphasized, for example, that India possesses 16 modern universities, and that in one of them—the Calcutta University—she can claim the largest university in the world. It is not too much to say, indeed, that Sir Michael Sadler and his colleagues on the Commission of 1917 were staggered by the magnitude of the institution, with its 58 affiliated colleges dotted over vast geographical areas and its 27,000 students. But the achievements of the British in this direction can only be properly assessed by those acquainted with the conditions under which the system of education has had to be set up. Religious and social custom has stood in the way of the provision of an adequate supply of women teachers, recognized as the essential instrument of elementary education in all Western

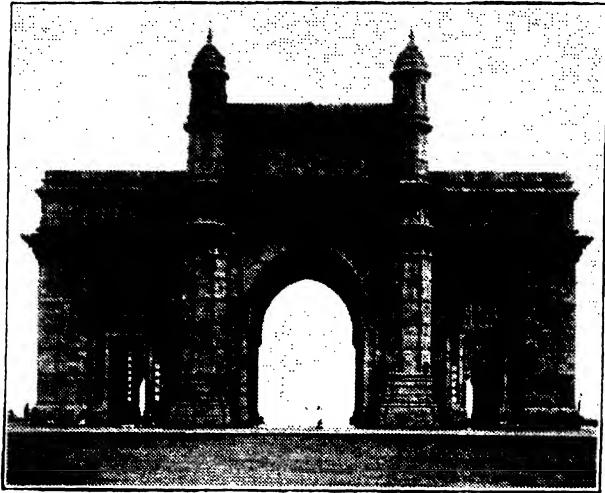
lands. And side by side with this formidable disability has stood another arising from yet one more of the baffling diversities of the Indian peoples—that of language. For if in India the medley of creeds is great, the confusion of tongues is greater still. In the little province of Assam nearly one-half of the people speak Bengali, one-fifth Assamese, while the remaining two-fifths among them speak no fewer than 98 different tongues. In the Census Reports for India as a whole more than 200 dialects, belonging to six distinct families of speech, are officially recognized. The effect of this state of affairs upon the educational system has necessarily been profound, for it has led to the employment of a foreign language—English—as the medium of instruction in all but the more elementary stages of the curriculum, a handicap upon the pupil which it is impossible to ignore.

That the spread of education should in such circumstances have been slow is, perhaps, less surprising than that the system should have produced so versatile, so cultured, and, comparatively speaking, so large a minority—according to the Census of 1921, 2,500,000 passed the test of literacy in English—imbued with the culture of the Western world. For in the ranks of this minority are to be found great lawyers and eminent Judges, fine scholars and brilliant scientists, capable administrators, talented writers, engineers, doctors, artists, architects, and captains of modern industry. The deficiencies of the system may be readily admitted; but Indians themselves should be cautious in their denunciation of it, for it is an outstanding feature in a number of factors which have gone to make the appointment of the Statutory Commission possible.

Without the unifying influence of British administration—a dynamic force of extraordinary power in view of the many and startling diversities of the Indian continent—no political Constitution, such as that which is now in sight, would have been conceivable. And, with all its drawbacks from an educational point of view, the imposition and wide diffusion of the English tongue has had a unifying influence of remarkable effect. No more striking proof of its value from this point of view could be desired than is provided by the fact that the proceedings of conferences of all kinds held by Indians from all parts of the continent are conducted as a matter of course in English. Whatever significance may attach to the favourite catch-cry of the Indian politician of to-day—“India a nation”—is derived from the genius which the British have shown for breaking down the barriers with which the many fragments—racial, religious, linguistic, and cultural—of which the population is composed are

THE PAST AND THE FUTURE

hedged around. From the point of view from which the people of this country will now be called upon to examine and pass judgment upon the future relations between the two countries this is by no means the least of the achievements which stand to the credit of Great Britain in India.



"Gateway of India," Bombay.



THE STATUTORY COMMISSION.—Sir John Simon, the chairman, is at the head of the table round which from his left are : Lord Burnham, Hon. Edward Cadogan, M.P., Major Attlee, M.P., Lord Strathcona, Colonel G. R. Lane-Fox, M.P., and Mr. Vernon Hartshorn, M.P.

CHAPTER II

THE STATUTORY COMMISSION

The Statutory Commission is nearing the close of the task which has occupied its members for more than two years. Within a few weeks their Report will be submitted to his Majesty's Government. The occasion justifies the publication of this volume, and, though controversial politics are, as far as possible, excluded, it also demands a necessarily incomplete account of the circumstances in which the Commission was appointed, of the situation which confronted it on its arrival in India, and of the subsequent course of its investigations.

The appointment of the Commission involved no change of policy. It was statutory, inasmuch as it was provided for in the Government of India Act of 1919. The only change was in the date. The relevant section of the Act provided for its appointment "at the expiry of ten years" after the Act had been passed. Shortly after the appointment Lord Birkenhead justified the encroachment on the statutory ten years' interval to the Upper House on the ground of the steady decline of "non-cooperation" and the improvement of the relations between Great Britain and India. But while the Act left no doubt as to how the members of the Commission were to be appointed—"The Secretary of State with the concurrence of both Houses of Parliament shall submit for the approval of his Majesty the names of persons to act as a Commission . . ."—it did not specify how they were to be selected.

The omission was perhaps unfortunate. If the logical course of making the Commission a body of delegates from the Imperial Parliament had been laid down from the outset, there is no reason why it should have had any effect on the Indian political parties. The extreme Nationalist leaders had committed themselves to opposition to the Reforms since April 22, 1919, when the Montagu-Chelmsford Report was first published, while even the painful events of 1919 did not deprive the Government of the support of the Moderates. But in 1927 the Government and its advisers in the India Office and elsewhere found it easier to agree upon the appointment than upon the composi-

tion of the Commission. A number of schemes appear to have been examined—a purely Parliamentary Commission, a Parliamentary Commission reinforced by British experts in Indian affairs, a Commission composed of members of both Houses, British experts and representatives of the principal Indian parties, and many more besides. Before the Autumn Recess of 1927 the Government had finally come back to the view that the inquiry should be conducted by a purely Parliamentary body. As finally constituted it consisted of Sir John Simon (chairman), Lord Burnham, Lord Strathcona, Hon. Edward Cadogan, Colonel George Lane-Fox, Major C. R. Attlee, and Mr. Vernon Hartshorn.

There were excellent reasons for the ultimate decision of the Government. It was clear that if the members of the Commission were to achieve any success they must be restricted in number, selected in a manner that gave some hope of an agreed report, and, above all, sure of the support of the Imperial Parliament, the sole authority which could expedite or delay Indian constitutional progress. British experts, though selected from eminent ex-Viceroy and ex-Governors, would not necessarily command that support, and experts had been known to disagree. The divisions among Indian political parties were so wide as almost to ensure the publication of as many minority reports as there were Indian representatives. But, apart from all these practical reasons, the logic of the case demanded that Parliament, which could not visit India in a body, should be informed by a selected delegation of its own members about a situation which was already sufficiently familiar to Indians. The business of the Commission, in short, was not that of constitution-makers but of *rapporteurs*.

Meanwhile a programme outlined in Parliament by Mr. Baldwin, and amplified by the Viceroy in a statement issued at Delhi on November 8, promised representatives of the Indian Central and Provincial Legislatures the fullest opportunity of laying their views before the Commission. They could also challenge its findings through delegations appearing before the Joint Select Committee of Parliament to which these findings would be referred before being submitted to Parliament, and thus influence the recommendations of the Committee while Parliamentary opinion was still fluid.

In this country the Government's decision was supported almost unanimously by all three parties. In India, where a breach of confidence had prematurely disclosed it, the first reaction was hostile. The omission to appoint representative Indians was interpreted as "an

insult to India," and the leaders of the Congress Party were supported by several prominent Liberals and Responsivists in demanding the boycott of the Statutory Commission.

The chief cause of this hostility was the pressure exerted on the moderate elements by the extremists in a country where it had become fashionable to attack the "alien" Government on all occasions. This pressure usually prevented the Moderates in the Congress Party from cooperating with Government at all, and restricted the cooperation of Independents and Liberals, who were tempted to play to the electoral gallery. A subsidiary cause was the irritation caused by the publication at the moment of Miss Mayo's "Mother India," which some Indian leaders erroneously supposed to have been inspired by British die-hards seeking to delay Indian political progress by attacking Hindu social institutions. But the Home Government must share in the responsibility for the difficulties of the Commission in having neglected to prepare Indian opinion for the appointment of a purely British Parliamentary delegation or to explain in advance that it would be appointed to frame recommendations, not decisions, to act as a jury, not as a tribunal. Nevertheless, widely as the boycott spread, it was far from universal. The Mohamedans, whose attitude towards Constitutional Reform is admirably explained in an article contributed to this volume by the late Sir Valentine Chirol, generally refused to support it, and their refusal led the Hindu minorities of the Punjab and Sind to decide that it would be impolitic to leave the Moslems in possession of the field. The representatives of other minorities imitated the Moslem* example. Most Liberals recoiled from the wilderness of non-cooperation. But there remained the risk of a sudden extension of the boycott and the probability that it would be supported by the majority in the Assembly and in some of the Councils.

The Commission left for India on a brief preliminary visit in January, 1928, and arrived at Bombay on February 3 to be welcomed by deputations of Moslems and Hindus, while hostile students raised from a distance the cry of "Go back, Simon." The cry was to become drearily familiar to the Commissioners, whom its repetition might have reminded of the call of a cock-grouse.

Before his ship reached Bombay Sir John Simon had prepared his reply to the boycott. In a letter addressed to the Viceroy he proposed that the evidence laid before his Commission should be examined by a "Joint Free Conference" consisting of the seven British Commissioners and corresponding bodies of representatives chosen by the different

Indian Legislatures. He invited the closest cooperation from Indian legislators and reminded them that he and his colleagues were not instruments of any Government, but an "independent and unfettered" body. The invitation was rejected by the boycotters, who interpreted it as an attempt to bargain, but informal conferences with cooperating politicians began immediately. Thenceforth, in spite of a narrow victory of the supporters of a motion boycotting the Commission in the Assembly and the passing of similar motions in the Councils of Madras, the Central Provinces and the United Provinces, the boycott began to lose headway. Only three days after the vote in the Assembly the Council of State adopted a resolution in favour of cooperation with the Commission. Burma and the Punjab followed its example, and the Commission concluded its reconnaissance in a spirit of cautious confidence.

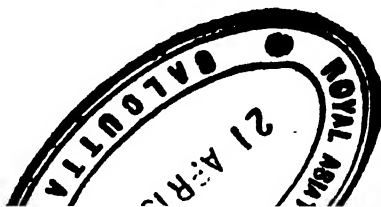
During the summer of 1928 the Commission took evidence in London, while the non-cooperators sought to intensify the boycott against its return. Their rivals won Council after Council for cooperation until, by October, only the Central Provinces remained aloof. The exasperation caused by these reverses embittered the boycott agitation, both among the Congress party and among the revolutionaries; an infernal machine which exploded prematurely near Manmad was intended for the Commission by conspirators of the same fanatical type as the Communists who threw bombs into the Assembly before Sir John Simon's eyes on April 9; on occasions the Commissioners were received with contumely and stone-throwing by demonstrators often hired for a few annas or inflamed by preposterous stories. But in spite of another narrow victory of the non-cooperators in the Assembly and the absurd "ultimatum" to the British Government passed by the Calcutta Congress on December 31, 1928, the boycott demonstrably failed. It did, indeed, prevent the Commission from making a complete survey of the situation, but it did not deter a large number of representative Indians, and in particular the Central Committee, which has just published its report, from loyally assisting it, as witnesses or as colleagues.

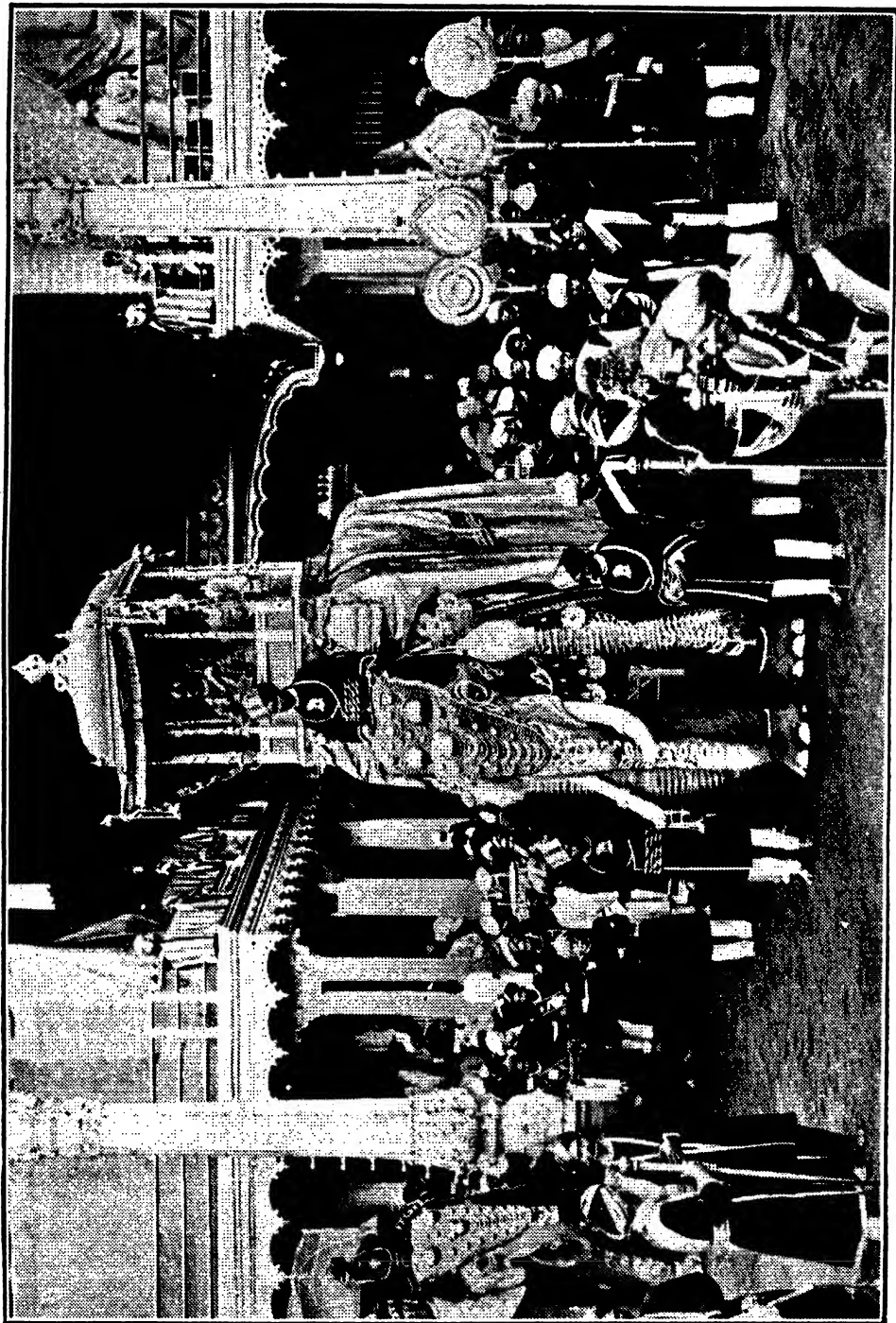
After the return of the Commission from its second tour yet another bridge was built for the non-cooperators. The occasion was found in the Report of the Indian States Committee, which had been appointed to report, *inter alia*, on the "financial and economic relations between British India and the States and to make any recommendations" that it considered desirable or necessary. Clearly any scheme of constitutional progress in British India which made no provision for the political or economic relations between it and these extensive and

populous principalities would be a source of serious complications in the future. The Princes, who in February, 1929, had protested against the extremist demand for a severance of the political connexion with Great Britain, made it clear that they desired to be consulted concerning changes which might vitally affect their interests. Accordingly, on October 16, Sir John Simon wrote to the Prime Minister inquiring whether the scope of the Commission's Report might be widened to include an examination of the methods by which the future relationship of British India and the Indian States should be adjusted, and suggesting that after the publication of the Reports of the Statutory Commission and of the Indian Central Committee the Government should meet representatives of British India and of the States in conference. This conference should precede the stage which had previously been announced of a Joint Parliamentary Committee conferring with Indian delegations. After consultation with the leaders of the Opposition Mr. MacDonald agreed to the enlargement of the scope of the Report and to the suggestion for a triangular conference. On the publication of the correspondence Lord Irwin, who had just returned to India, issued a statement emphasizing the importance of the change in procedure and repeating, with the authority of the British Government, that in their judgment it was implicit in the declaration of 1917 that "the natural issue of India's Constitutional progress, as there contemplated, should be Dominion status."

The Viceroy's reaffirmation—it was no more—of the ultimate purpose of British policy exposed the Government which had authorized it to some criticism in the Press and subsequently in both Houses of Parliament. But a conciliatory statement by Sir John Simon, and his plea that Parliament should leave the Commission to finish its task in peace, suppressed any desire that might have survived the statesman-like speeches of Mr. Benn and Mr. Baldwin to make party capital out of a situation which was only adding to the difficulties of the Commission. This narrative has indicated already how great these difficulties had been. The strain of unintermittent toil and travel, perpetual public sessions, the exploration of a vast field of evidence, the enforced study of the historical, economic and social factors that have made the complicated Indian problem, must be added in order to give a fair picture of the burden borne by the seven Commissioners.

27613.





The Maharajah of Mysore at the Dassara Festival, 1929.

CHAPTER III

THE INDIAN STATES AND THE CROWN

*By SIR HARCOURT BUTLER, G.C.S.I., G.C.I.E., Chairman
of the Indian States Committee*

THE importance of the Indian States is sometimes overlooked. They are in India but apart from British India. Their subjects are not British subjects. They are not governed by the laws of Parliament or the Indian Legislature. They are outside the jurisdiction of the Courts of British India. For the most part they are under the personal rule of their Princes, who, in turn, are under the Crown as Paramount Power. They occupy over a third of the area of India proper and contain about a fifth of its population. They are the most picturesque part of India, being the ancient indigenous systems of government, which have survived the establishment of British dominion on the ruin of the Moghul Empire and the Mahratta supremacy. They stretch interlocked with British India from the eternal snows of the Himalayas in the north to the lagoons of the south only eight degrees from the equator; from the ports of Kathiawar on the west to the wild jungles of Manipur on the east. They defy classification. In them are found every kind of people, every kind of produce, several forms of government, mostly complete autocracies. At one end of the scale is the great State of Hyderabad, with a population of 12,500,000 and a revenue of some £5,000,000 sterling; at the other end are the petty chiefs of the Simla hills, who are carefully controlled by a British officer. Sir Thomas Holderness tells the story, current in his day in Simla, of a visit to the British Superintendent by a peasant headman, who showed a key saying that they had deposed their Rajah and locked him in his bedroom, and asking what should be the next step in a properly conducted revolution. Some forty Princes have treaty relations with the Crown securing their internal sovereignty: some more exercise full political powers within their territories. None can have relations with other Princes or with a foreign Power. All alike are distinguished for their services to the Empire in its times of need, in the Mutiny, in the Great War, and on other occasions, and for their passionate loyalty and

devotion to the Throne and Person of his Majesty the King-Emperor. The modern relationship between the Paramount Power and the Indian States dates from the assumption by the Crown in 1858 of the direct government of India in succession to the East India Company. The States were then guaranteed against annexation, but as a corollary the Paramount Power insisted on its obligation to intervene in the interests of good government. The degree of intervention has varied from time to time with the development of India and the necessities of Imperial policy. It received an impetus from the growth of an efficient Political Department, and reached its zenith during the Viceroyalty of Lord Curzon. The administration of many States then broke down under the strain of the famine of 1899, and drastic intervention became necessary. The balance was redressed by Lord Minto in 1909 in a speech at Udaipur. "Our policy," he said, "is, with rare exceptions, one of non-interference in the internal affairs of Native States. But in guaranteeing their internal independence, and in undertaking their protection against external aggression, it naturally follows that the Imperial Government has assumed a certain degree of responsibility for the general soundness of their administration, and would not consent to incur the reproach of being an indirect instrument of misrule. There are also certain matters in which it is necessary for the Government of India to safeguard the interests of the community as a whole, as well as those of the Paramount Power, such as railways, telegraphs, and other services of an Imperial character."

The Montagu-Chelmsford Report recommended, among other things, the establishment of a Chamber of Princes. This was created by Royal Proclamation in 1921, and consists of some 120 members. Though not largely attended, and though its powers are limited, this Chamber has served as a meeting ground for a certain number of Princes. Here they have informally discussed among themselves their grievances, the menace to their internal sovereignty of the pressure of Imperial Departments in their zeal for uniformity, the effect upon themselves and their subjects of decisions reached in British India on financial matters such as a protective tariff or the stabilization of the rupee, the possibility that political developments in British India might affect their direct relationship with the Crown. A feeling of greater solidarity was no doubt stimulated. Eventually, in 1927, certain Princes asked the Viceroy for a special committee to examine the whole position as regards their relationship with the Paramount Power, their right to be consulted, and the redress of their grievances. In

December of that year a Committee was appointed, consisting of Colonel the Hon. Sidney Peel, an eminent financial authority, Professor Holdsworth, K.C., Vinerian Professor of English Law at Oxford, and myself as chairman. They visited many States, took much evidence, and heard the arguments of eminent counsel, Sir Leslie Scott, K.C., M.P., who represented a number of Princes. Their report was published in March, 1929.

The report covers much ground, and no decision has been reached regarding its recommendations. For the purpose of this chapter it is only necessary to state the principal recommendations and the resulting position. On the economic side, the Committee recognized that the States had certain claims to consideration, especially in the matter of maritime Customs swollen by a protective tariff. The Government of British India had, they said, the undoubted right to impose maritime Customs—the States themselves imposed import and export duties on their own borders, aggregating nearly £3,500,000 sterling a year—but the introduction of a protective policy with high Customs duties and without the agreement of the States gave the States an equitable claim to a share in the resulting revenue. A *Zollverein*, combined with the abolition of internal Customs in the States themselves, would be the ideal solution, but many States would not give up their own import and export duties. British India would have to foot the bill of any concessions and might reasonably claim that the States should bear their full share of Imperial burdens. An expert body should therefore be appointed to work out a financial settlement between British India and individual States or groups of States. Such a body could deal with other financial grievances. So far as possible the States should be consulted in future in regard to policy affecting them financially before decisions were reached, but there was a real practical difficulty in the number of States, the absence of any combined policy among them, their slow methods of procedure, and the great distances that separated them from one another and the Government of India. There were other recommendations, but this was the most important suggestion on the economic and financial side.

On the constitutional side, for present purposes the more immediate side, the Committee, after an elaborate examination of history, theory, legal opinion, and modern fact, came to several definite conclusions. They found that the relationship between the Princes and the Paramount Power was a relationship with the Crown; that the treaties were made with the Crown; that the Crown had guaranteed the rights and privileges of the Princes; that treaties, engagements, and sanads, where

they existed, were of continuing valid force, but had necessarily been supplemented by usage and sufferance and the decisions of the Government of India and the Secretary of State embodied in political practice in order to meet changing conditions in a moving world. The general working of paramountcy was described, but the Committee could not define it. Paramountcy must remain paramount. Imperial necessity and new conditions might at any time raise unexpected situations. The relationship between the Paramount Power and the States, thanks to good feeling and compromise on both sides, had been in the main one of remarkable harmony for the common weal. The cases of intervention had been few. Of late the Princes had been consulted freely, and this process should be developed. The codification of political practice and the appointment of committees of inquiry and arbitration recommended by the Montagu-Chelmsford Report should dispose of many grievances and differences satisfactorily. The principal recommendations of the Committee were two. First, they recommended that the Viceroy and not the Governor-General in Council, as hitherto, should be the agent of the Crown in dealing with the Indian States. The Council of the Governor-General consisted of heads of departments responsible for British India without knowledge of or sympathy with Indian States. The Viceroy had always held the portfolio of the political department himself, so that the change in practice would not be great. Secondly, they recommended that the Princes should not be transferred without their own agreement to a relationship with a new Government in British India responsible to an Indian Legislature.

Is any bond of closer union possible between the two Indias? That is the outstanding problem. The Indian States Committee left the door open, though impressed with the need for great caution in dealing with a body so heterogeneous as the Indian Princes, so conservative, so sensitive, so tenacious of internal sovereignty. Their terms of reference precluded them from making recommendations on this point, nor could they have made an attempt until they knew what the Statutory Commission proposed for British India. The recent correspondence between Sir John Simon and the Prime Minister has removed the difficulty of procedure. It has been decided, with the approval of the three English political parties, to enlarge the scope of the Statutory Commission so as to consider this great problem. The Indian Princes will be invited to join the round-table conference before which the report of the Statutory Commission will be laid. The problem will therefore be considered from every point of view.

CHAPTER IV

THE NATIONALIST MOVEMENT

The political or, if we prefer the word, the nationalist movement in India presents a somewhat baffling exterior to students because of late years it has changed its leaders with some rapidity, and it has sometimes been difficult to determine its objectives. At the present time, for example, the air of political India is charged with cries of Dominion status within the Empire for India and counter-cries of independence for India. Nevertheless, the narrative of the growth of the movement will show that it has developed along lines possessing certain resemblances to other and, to the student of European history, more familiar national movements. But these resemblances must not be unduly emphasized.

The inauguration of the All-India National Congress in 1884 may be taken as the first really definite stage in the modern political movement in India. Before that year there had from time to time been criticism from Indian quarters, particularly in Bengal, of the doings of the Indian Government, expressed in public meetings and in the rare newspapers owned by Indians. But such criticisms were spasmodic and limited to particular objectives, and could not be regarded as symptoms of a genuine, widespread political movement. The Indian Congress itself was heir to half a century's development. The Charter Act of 1833 enunciated the principle of equality of all classes of British subjects, a principle reaffirmed strongly in the proclamation of 1858. The Councils Act of 1861 brought into the Indian Government the principle of direct representation of Indian interests by Indians, and this was reinforced by the Councils Act of 1892, which brought into being a new and potent principle in Indian politics—the principle of election. All these principles were to gather strength and work powerfully towards the political and constitutional progress of India. But the single event which, above all others, precipitated the decision of certain Indians and their English sympathizers to embody Indian political aspirations in a definite political organization was the famous Ilbert Bill agitation.

Thus the last years of the nineteenth century saw the ground properly

prepared for the modern political movement in India. Communications were sufficiently developed, a knowledge of English had permeated throughout India, albeit to a limited degree, and influential men were ready and willing to take up the work. Among the fore-runners and pioneers of the modern movement the names of Dadabhai Naoroji, Mr. Gokhale, and Bal Gangadhar Tilak stand out prominently, and each of them approached the task from an individual angle. Among Mohamedans the name of Sir Seyed Ahmed stands pre-eminent. He laboured for the educational and economic uplift of his community, and strongly opposed Mohamedan participation in the Congress. So great has his influence been, even after his death, that Indian Mohamedans have, as a community, always held aloof, preferring to give expression to their political and other ideals through the medium of the All-India Moslem League.

The Indian political movement received a fillip in 1907 by the famous Partition of Bengal. This led to a movement of protest which, in the outcome, solidified the political movement, extended its objectives, and took it into quarters where hitherto it had not penetrated. The Morley-Minto Reforms, which greatly amplified the working of the principles of representation and election in Indian politics, the achievement of India during the War, and the famous pronouncement of August, 1917, are too well known to need more than passing mention here.

We enter on to the doings of our own days with the passing of the Government of India Act of 1919—the Montagu-Chelmsford Reforms. It is well known that the inauguration of the Reforms of 1919 were heralded and succeeded by the most general, the fiercest, and the longest political agitation in the history of British India. This was the non-cooperation cum Khilafat agitation, of which the principal leaders were Mr. Gandhi and the Ali brothers. The non-cooperation movement was Mr. Gandhi's response to certain features of Governmental action during the Punjab troubles of 1919, and particularly to the Amritsar affair. The Khilafat agitation concerned Mohamedans primarily, and was ostensibly a movement of protest against the terms of the peace treaty with Turkey, which the Ali brothers and their supporters represented as being calculated to destroy the power of Turkey—that is, the temporal power of the Khalif of Islam.

Thus for a time Hindus and Mohamedans united in this twin agitation, and at its very height the 1919 Reforms were inaugurated in 1921. Naturally they did not have a fair chance, even though large and very influential sections of political India entered the new and enlarged

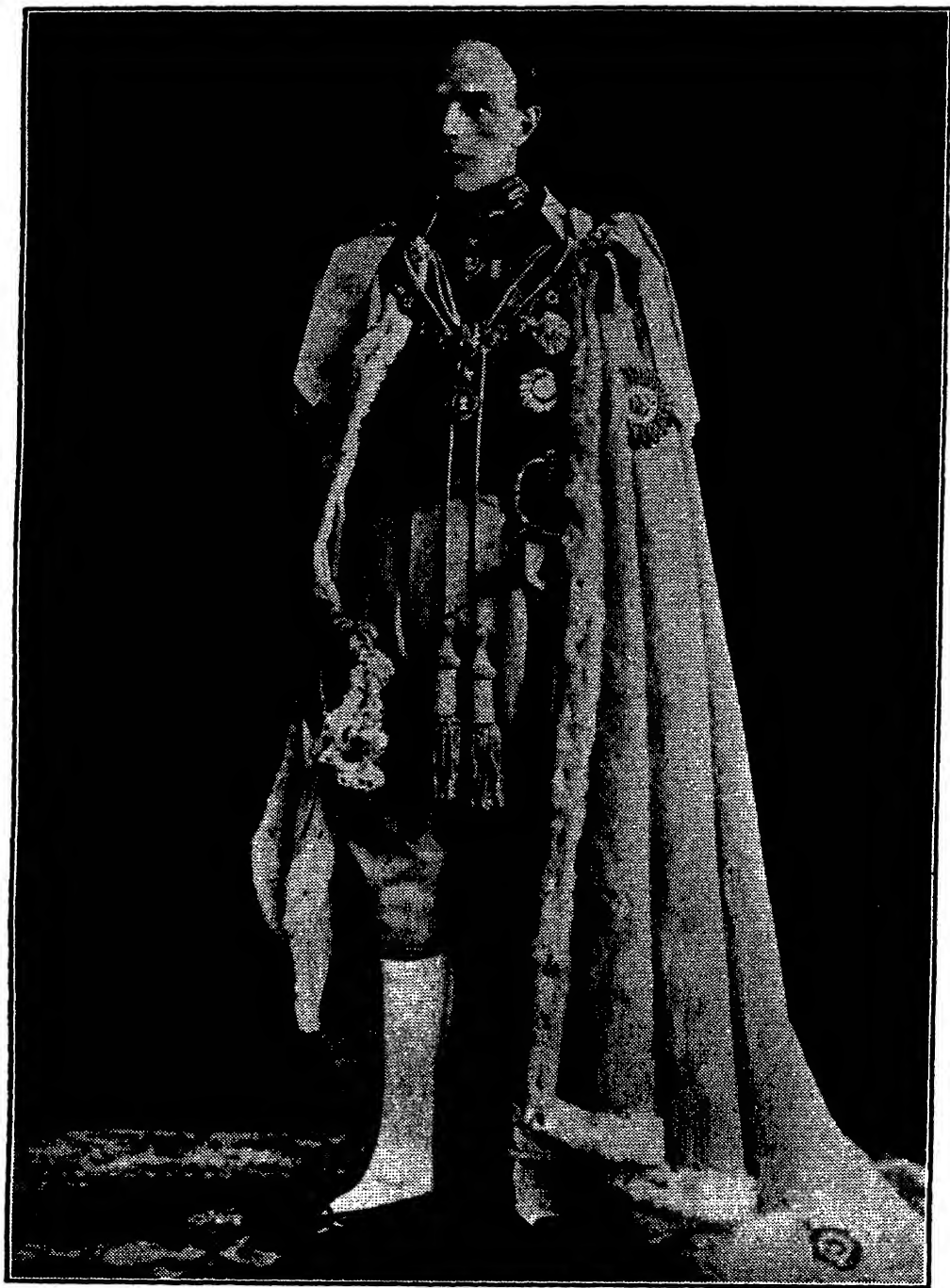
THE PAST AND THE FUTURE

Legislative Councils and took office as Ministers and executive councillors. But by the end of 1923 Mr. Gandhi had fallen from political power, and was succeeded by the late Mr. C. R. Das, the Bengali politician, who abandoned the Gandhian conception of absolute abstention from the Councils and substituted the doctrine of destruction from within. He therefore allowed his Swaraj, or Home Rule, Party to enter the Provincial Councils and the central Legislative Assembly, and to try, by persistent obstruction of their business, to reduce them to impotence. In Bengal and the Central Provinces this policy once or twice caused the temporary cessation of the working of the reformed system, but has failed elsewhere. The lesson of the years 1923-29 is that the Reforms have proved stronger than their would-be destroyers.

That opinion stands in spite of the recent reappearance of Mr. Gandhi as a public force in Indian politics and of the resolution passed by the Congress at Lahore in the closing days of 1929. The Congress Party are now committed to the ultimate goal of complete independence for India and to the immediate withdrawal of their members from the central and provincial legislatures. How far this new ban on cooperation will prove effective remains to be seen. Meanwhile the Lahore meeting is proof conclusive, among much else, of the continued prevalence of communal and racial schisms, and it is more than ever certain that British rule alone is the power which holds together all the diverse elements of a nation *in posse*.



Mr. Gandhi.



Lord Irwin, the Viceroy of India.

PART II

GOVERNMENT AND FINANCE

CHAPTER I

THE CENTRAL AND PROVINCIAL GOVERNMENTS

India presents to the world the unusual spectacle of a Government which is avowedly in a state of transition. As a rule Governments regard themselves as being the last word in political architecture. Monarchs rarely profess that they are but the temporary forerunners of Republics. Parliamentary or Presidential democracies do not look forward to being replaced by more scientific forms; and when democracies break down into dictatorships the dictators do not talk much about making way for more perfect successors. But in India we can study a Government in the chrysalis stage. It is not quite sure about its present existence. But it remembers changing from something that was familiar and recognizable and it expects rather uncertainly to hatch out into something else.

Up to 1909 or so there was no doubt what sort of Government India had. It was a civil or non-military autocracy vesting originally in the East India Company, then shared by the Company and the home Government, and, after the Mutiny, taken over by the latter. Constitutionally speaking, the supreme power rested with the electors of this country, who made and unmade Ministries, and therefore called the Secretary of State for India and the whole Cabinet to account if unacceptable things were done in India. The Secretary of State could give any orders he liked to the Governor-General and his Council of six or seven members appointed by the Crown. The Governor-General in Council, in his turn, could require any Provincial Government to obey his orders, whether such Government was multiple, as in the provinces, where there was a Governor in Council, or whether it was vested in a single Lieutenant-Governor or Chief Commissioner. Provincial Governments again had fairly complete control over the officers under them.

Such a system provided no means for bringing Indian opinion to bear effectually on the Government. It is true that there were councils

for the purpose of passing laws, but these were so composed as to furnish majorities on which the Government could rely. The Indian representatives might criticize and demur, but unless the Government chose to defer to their objections they could not make it do so. This old system found its typical expression under Lord Curzon. He stood emphatically for certain British qualities in government : for efficiency, honesty, energy, progress. He worked the system as well as it could be worked, and he believed in it and took no thought to get it altered. He was not concerned to inquire whether mental processes might not be at work which would make the continuance of sheer autocracy unacceptable to an increasing number of the people of India.

One reason which accentuated the dissatisfaction with the Curzonian scheme of government was that no one felt that constitutional theory corresponded with reality. Parliament and the British elector rarely showed any lively concern with India. There was a maxim that Indian questions should never become a party matter lest India be lost upon the floor of the House of Commons. The British people were generally content to leave things to the Secretary of State and to the Government of India, and power rested sometimes in Whitehall but possibly more often in Calcutta, according as the personality of the Minister or of the Viceroy for the time being predominated. The Government in India in fact relied far less upon any mandate from the people of Great Britain than upon its own experience and efficiency and the tradition and prestige of a century of rule. This does not imply that it was not thoroughly conscientious and honourable. It set high standards before itself, and it resisted the claims of self-interest to a remarkable degree. But as soon as even a slight growth of political consciousness occurs in a people, any administration that is not seen to draw its strength or inspiration from some popular source must expect its supremacy to be challenged.

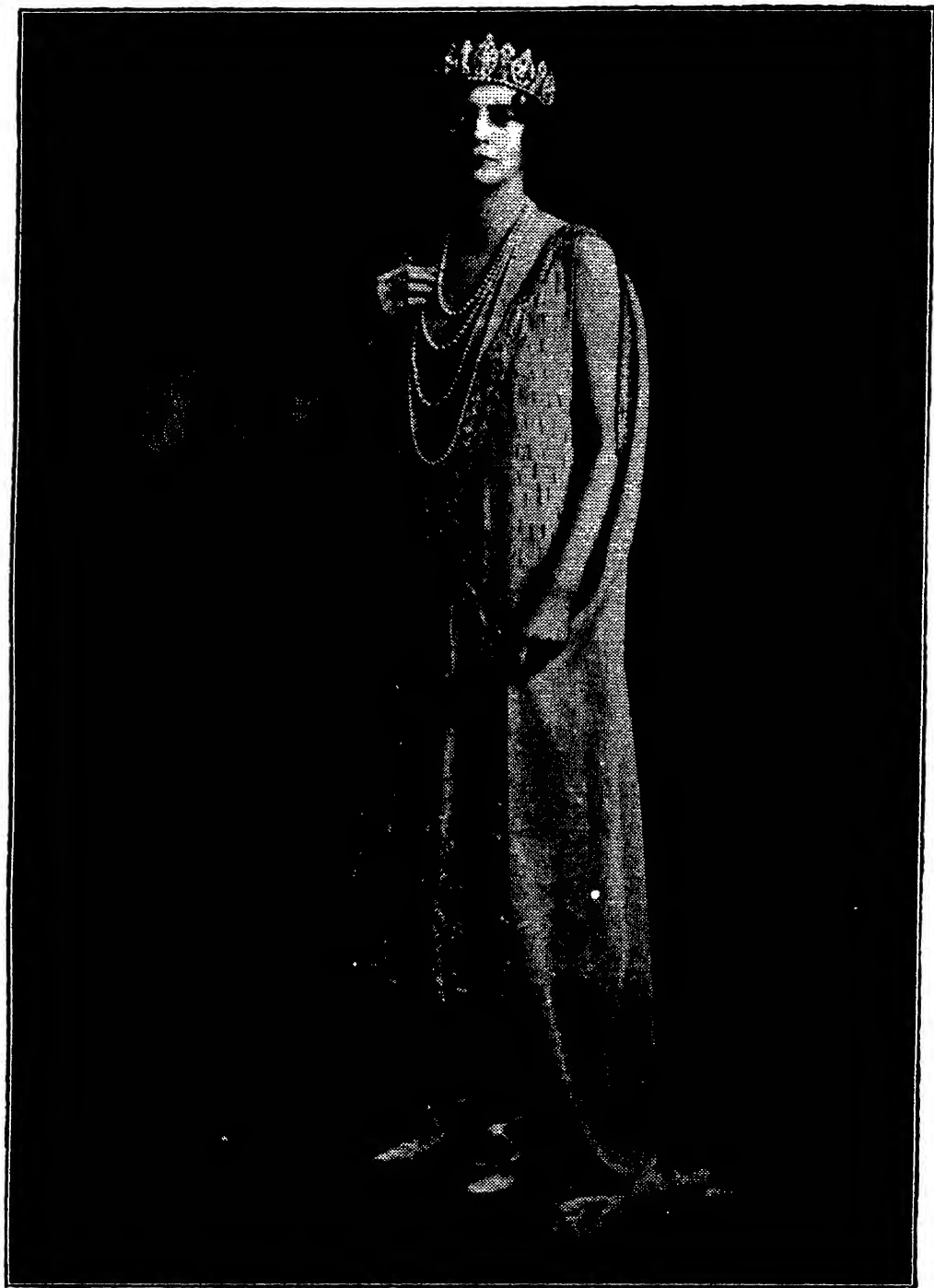
The reaction from the drive and efficiency of Lord Curzon's days coincided with the advent of a Liberal Government to power, and Lord Minto soon set himself to liberalize the Constitution of India. Neither he nor Lord Morley aimed at setting up a Parliamentary system; the utmost they sought to do was to bring some Indian members into the executive Governments, to enlarge the Legislatures, and to make it necessary for the Governments to secure the support of some non-official members if they were to carry their proposals. The Councils were allowed to discuss the Budget, but not to vote upon it; and also to move resolutions and to press the Government with questions. These

changes were known as the Morley-Minto Reforms, and they lasted from 1910 to 1918. At a later date it was the fashion to abuse Lord Minto's constitutional scheme. Some of its weaknesses were real; the provinces were held too tightly under the thumb of the Government of India, and as long as the Governments were entirely free of responsibility to the Councils, there was an air of unreality and declamation about debates. But among the causes which led to further changes in 1918-19 the defects of Lord Minto's work took quite an inconspicuous rank.

The reforms associated with the names of Lord Chelmsford and Mr. Montagu were in the main a consequence of the War. It would be quite unfair to say that their main aim was "to keep India quiet for a bit." They were the outcome partly of gratitude for the part which the Indian Princes and troops had played and partly of the enthusiasms and generous sentiments of the time which found expression in phrases about self-determination and justice for the weaker peoples.

The cardinal tenet of the reformers in 1919 was this: It is no use, they said, letting Englishmen take all the responsibility while Indians can only find fault. No one can criticize sensibly without practical knowledge and experience. We must get Indians, too, to take office; we must subject them to the chastening criticism of their own people. In a word, there must somewhere in the scheme be found a place for Indian Ministers who would go out of office and make way for others if the Councils passed an adverse vote against them.

But in carrying this idea into practice the reformers felt it necessary to go carefully. Advance could be made more safely in the provinces because the ultimate functions of government upon which depended the stability of the country must remain with the central authority which controlled the Army; and, also, the prospects of success were better because local Governments were concerned with questions rather nearer home which the voter might be expected to understand. But even in the provinces it was not thought possible to commit the whole sphere of government to inexperienced Indian hands. "Complete responsibility," said the Report of 1919, "cannot be given immediately without inviting a breakdown." But some responsibility must be given at once. So there was brought into play one of the newest and boldest devices ever known in the history of politics. The business of administration was cut in two. Education, agriculture, public health, public works, and local authorities were made over to Indian Ministers responsible to the councils with elected Indian majorities. Police,



Lady Irwin.

justice and gaols, revenue, canals, and (in most places) forests were left in the official hands of the Governor in Council, who was responsible through the Government of India to the Secretary of State, and through him to the British electorate.

The provincial machine was, as it were, in future to be driven from two perfectly distinct sources of power: for certain purposes it would be impelled by an internal combustion engine and for other purposes by a motor receiving current from a distant dynamo. If the several functions clashed or overlapped obviously the component parts might be violently jarred. In such cases one or other source of power must be cut off. For this purpose the engineer-in-charge was given a control switch. The Governor was to declare in any given case whether the right of action lay with the Indian Council-driven half or with the British Parliament-driven half of the Administration.

Such, in brief, was the provincial scheme. It was not worked out quite to its logical conclusion. Ministers were left rather dependent for their allotment of funds upon the Governor in Council, and also for their control of public servants. On the other hand, the Governor in Council had normally to depend on the Legislature for his Budget and his legislation. In so far as these departures from strict logic were deliberate, they aimed at tying the two halves of the Government together; in itself a laudable aim, if it had not clashed with the equally laudable and entirely incompatible ideal of leaving to each half the widest freedom of action, so that in due course each might fairly be judged by its performance.

As the Report almost naively observed, "Any attempt to establish equilibrium between the official and popular forces in government inevitably introduces additional complexities into the administration." Precedents were lacking; the working of the new two-headed engine must be experimental and depend on unknown factors. Therefore it was not felt wise simultaneously to bisect the Central Government, which ultimately guarded the happiness and security of 300,000,000 of people. So, at least, according to the proposition laid down at the time, the Government of India "must remain wholly responsible to Parliament, and, saving such responsibility, its authority in essential matters must be indisputable." But the Legislature was to be enlarged and its opportunities of influencing government increased.

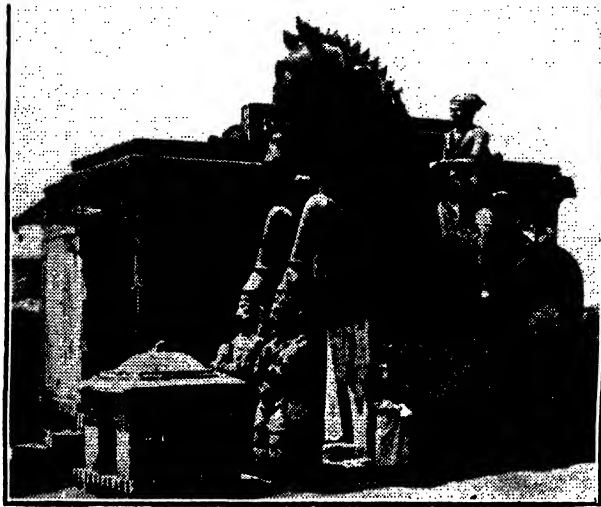
The result was to leave the Governor-General and his Government face to face with a strong elected majority in the Assembly, and therefore unable to make sure of getting their legislation or supply except by

the use of certain emergency powers. Under the Morley-Minto Reforms Governments (with the help, if necessary, of certain nominated members' votes) had been able to get their way. Now the Government of India, no less than the Provincial Governments, ran the risk of being defeated whenever a gust of racial or national feeling swept through the Legislature. This is a new and strange position to many people in India, who are still accustomed to regard the Viceroy as invested with unquestioned power as the King's deputy. It is also an embarrassing position for his Government. Traditions of Parliamentary administration require that due respect should be paid to a majority vote; but at the same time the Government of India ought to be free to discharge its duty to Parliament. The emergency powers, no doubt, give it a measure of freedom, but emergency powers are like a fire-escape and not meant for daily use. The result has been that the Government of India has been swayed between two incompatible loyalties. It has tried by making concessions on smaller points to carry the Legislature with it on major ones. The Assembly, unable to turn out the Government and to replace it by successors of its own choosing, has, naturally, not felt the restraints of which a Parliamentary opposition is conscious, and the quality of its criticism has suffered. On the other hand, the Government, anxious to avoid a deadlock, has lost something of its old dignity and strength, and has occasioned some disquiet to those who think that the first duty of a Government is to govern.

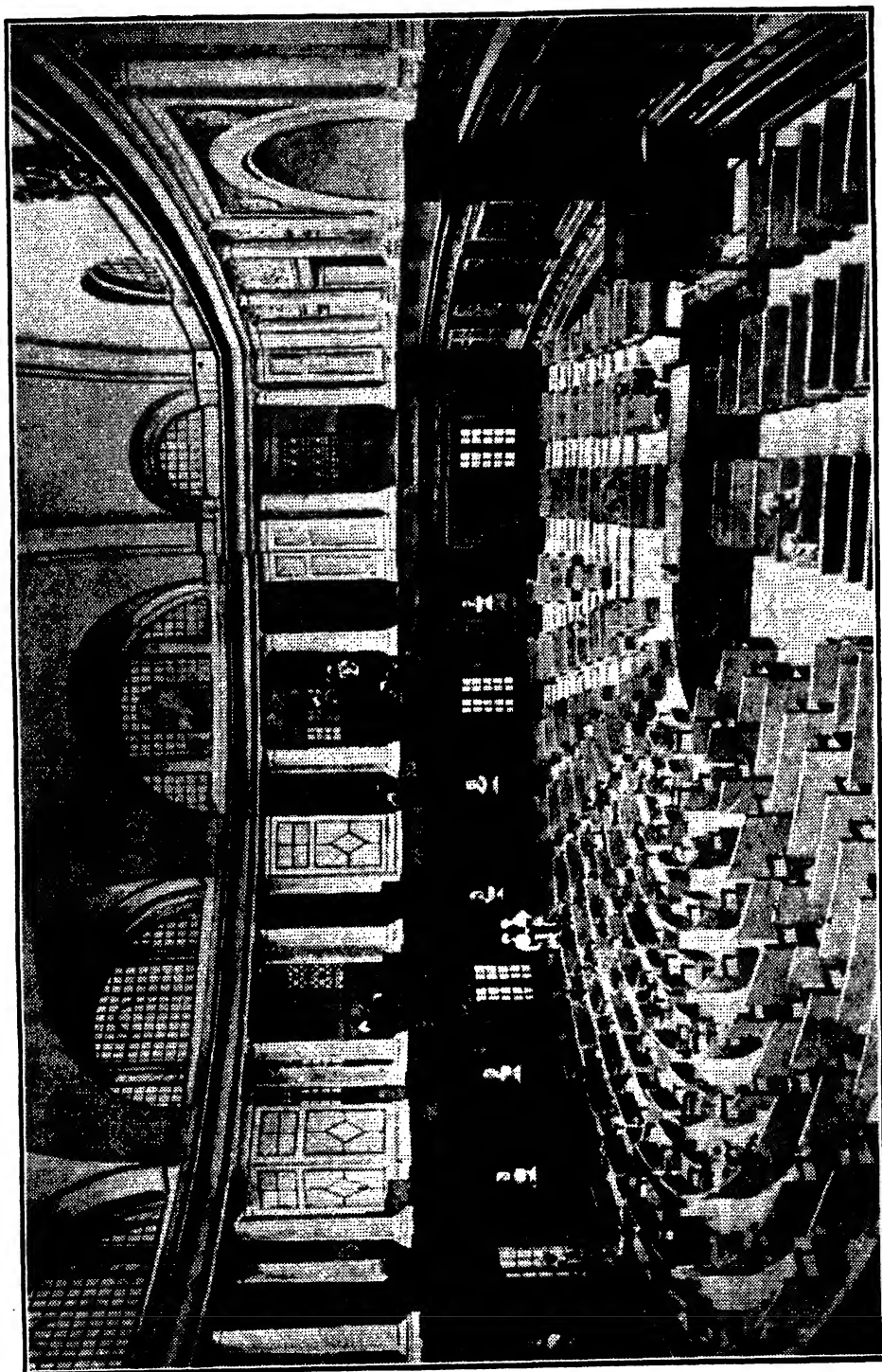
Elsewhere in the Empire such contact of an irremovable executive with an elected and therefore potentially hostile Legislature has produced acute dissensions and never proved a durable arrangement. It is curious that the reformers of 1919 should have supposed when they set up a similar arrangement in India that the device of the emergency powers was going to save the situation. The event has certainly shown that they cannot do so. The constitutional mechanism of the Central Government is obviously faulty and needs to be reconstructed.

The third outstanding feature of the reforms of 1919 was the provision which is responsible for the inquest which Sir John Simon and his fellow Commissioners are now completing. Cautious people who disliked the changes hoped that ten years' experience might show that they were unworkable. Advanced opinion welcomed the idea of a preordained inquiry because they reckoned that it would inevitably prelude a further advance. Between these forecasts it is for the Commissioners to judge. They have undertaken a most difficult task, and the vocal part of India has for the most part shown them small sym-

pathy and less gratitude. But Britain should not be equally unmindful. The Commissioners have patriotically undertaken an Imperial service of the utmost importance and the utmost difficulty. To build the next section of road along which the people of India may advance safely towards the goal of self-government is to do immense public service. The work has to be done under the eyes of the whole world. Whatever is done in India must have a great effect in determining the political future of all other politically backward peoples; and every Englishman must hope that the Commissioners' Report will rise to the height of the issues presented to them.



A statue at Madura Temple.



The Legislative Chamber, New Delhi.

CHAPTER II

FINANCIAL ADMINISTRATION

A brief outline of the historical development of the Indian financial administration shows that it has been a process of progressive, though slow, decentralization. Up to the time of Lord Mayo the Government of India had complete control of the financial administration throughout India, leaving little inducement to the provinces to economize in expenditure or to develop revenue. Lord Mayo in 1870-71 first introduced a scheme of decentralization, in which important modifications were introduced from time to time. The financial settlements with the provinces were at first quasi-permanent and were made permanent in 1910-11. The broad features of these permanent settlements were that certain services were retained by the Government of India and the rest handed over to Provincial Governments. To meet the cost of these services, present and prospective, a share of the chief sources of revenue was given to each province. There was, however, no uniformity as regards the percentage of each head of revenue allotted to the provinces. The income from these divided heads was supplemented by special contributions from the surplus of the Central Government. Control over provincial expenditure and over provincial taxation was retained by the Government of India.

With the grant of some measure of responsible government to the provinces by the Montagu-Chelmsford Reforms, an attempt was made to make a complete separation of the provincial from the central revenues, and the whole question was considered by a committee under the chairmanship of Lord Meston, from which the present settlement with the provinces derives the name "Meston Settlement." Under this settlement subjects were first classified in relation to the functions of Government as central or provincial, and, broadly speaking, the receipts accruing in respect of provincial subjects and the proceeds of any taxes lawfully imposed for provincial purposes were made sources

of provincial revenue. The Provincial Governments were also given a small share in the growth of revenue derived from income-tax collected in the province due to an increase in the amount of income assessed. The resources allotted to the Central Government were not at that time adequate to meet the Central Government's expenditure, and the situation was met by the payment of contributions by the provinces to the Central Government. These annual contributions, which amounted initially to £7,400,000, were to be progressively abolished in accordance with a fixed formula as soon as the financial position of the Government of India permitted.

The Central Government still retains complete responsibility for such all-important functions as the control of the note issue (in the absence of any central bank of issue), the management of the currency and resource operations, which are facilitated by an intricate system of currency chests at all district headquarters and many subdivisional headquarters throughout India, the maintenance of exchange, remittance operations required to meet the Secretary of State's payments in London, and the complete control of all Government balances, including the balances of the provinces. The ways and means operations of all the Governments in India are therefore one, and it follows that the Central Government still exercises an important measure of supervision and control over the general financial position of the provinces and over their borrowings, whether direct in the market or from the Central Government through the Provincial Loans Fund, an arrangement introduced in 1925 with the object of standardizing, as far as possible, the conditions under which the Provincial Governments may borrow from the Central Government. The Central Government has been much assisted in performing these functions by the amalgamation of the three Presidency banks, in January, 1921, into the Imperial Bank of India, which now holds all the Government balances and, in return for various privileges, such as the free transfer of its funds through currency, has opened 100 new branches in all parts of India within five years of its inauguration.

The progressive improvement in the Central Government's finances enabled the provincial contributions to the Central Government to be finally extinguished in 1928-29, thus increasing the resources of the Provincial Governments by the sum of £7,400,000 annually, as shown above. It was expected that the resources of the provinces thus augmented would enable them to finance large schemes of social and economic development. To a certain extent this has been so, though to

a varying extent in different provinces; and the amounts which have been devoted to the development of education, local self-government and public health have, in the aggregate, been large. All these are subjects which are "transferred"—that is, under the direct control of Ministers responsible to the local Legislative Councils—and removed, save in exceptional circumstances, from the supervision, direction and control of the Central Government. A measure of the increased expenditure and increased resources of the Provincial Governments can be obtained by taking the total revenue and expenditure of the nine Governors' Provinces in the year 1921-22 (the Indian financial year, it may be explained, begins on April 1) and comparing this with similar figures in the Budget estimates of the year 1929-30. In 1921-22 the revenue of the nine Governors' Provinces totalled £62,600,000 and the expenditure £69,100,000. In 1929-30 the corresponding figures were for revenue £71,500,000, and for expenditure £71,300,000. Rupee figures have in both years been converted at 1s. 6d. per rupee, the present statutory rate of exchange.

Although the aggregate expenditure in the provinces is covered by their revenue, it should be observed that six out of the nine Governments budgeted for a deficit in 1929-30. In some instances this was due to special circumstances. In Bombay, for instance, the deficit was mainly due to the heavy interest charges arising from large schemes of development undertaken some years ago in order to improve housing conditions in Bombay and to develop generally the city and its suburbs. In others the deficit was only temporary and represented outlay on non-recurring expenditure. And it should not be forgotten that all the provinces have to a greater or less extent balances in hand, including balances held as a special famine insurance fund, which, as explained above, are merged in balances of the Central Government or deposited at interest with the latter. These balances aggregate £11,800,000. Speaking generally, however, the present position of the Provincial Governments' finances reflects the greatly increased cost of progressive administration on modern lines and the development in particular of the national services which have been specially entrusted to their charge.

The present financial settlement has come in for much criticism on the part of practically all the provinces for the following reasons, among others: First, the provincial revenues are inelastic. The revenue from liquor excise, which is an important item in most provinces, is tending to fall and has to face the strong sentiment of many classes of

Indians in favour of prohibition. Again, land revenue, which is one of the main sources of provincial revenues, has shown very little sign of elasticity. Secondly, the present allocation of sources of revenue makes it impossible to adjust provincial taxation to the taxable capacity of the province. Commercial and industrial Bombay is quoted as an example of this inequality, which is likely to be felt with greater force as the burden of provincial expenditure increases. Thirdly, the industrial provinces have not benefited from a share of the income-tax even to the small extent anticipated. It may be stated, then, with confidence that a revision of the present financial arrangements; and the provision of larger and more elastic sources of revenue for the provinces, is essential for the political no less than for the economic development of India. This question is one which has been prominently before the Statutory Commission, and it will be interesting to see what new arrangements and what new sources of revenue Sir John Simon, with the help of Mr. Layton, will be able to suggest.

This sketch of the financial position of the provinces would be incomplete without some mention of the large schemes of capital development which have been undertaken within the last few years by the provinces. Most of these are of a highly productive character and include such schemes as the Sutlej Valley irrigation project in the Punjab, which serves also the Indian States of Bahawalpur and Bikaner; the Sukkur Barrage on the Indus, which will irrigate vast new areas in Sind; the Cauvery-Mettur project in Madras; and the Sarda project recently brought to a successful completion in the United Provinces.

At the time when the Montagu-Chelmsford Reforms were introduced the Central Government had for some years been struggling with a series of deficit budgets—the aftermath of the War. But the situation was taken vigorously in hand. Additional revenues were provided mainly through an increase in the rates of Customs duties and income-tax, and a Retrenchment Committee under Lord Inchcape led to large reductions in civil and military expenditure. The year 1922-23 ended the series of deficit budgets; in the following four years the surpluses aggregated £10,700,000. During this period of surpluses the provincial contributions were being progressively reduced. In 1927-28 the Budget again showed a deficit of £1,700,000, which, however, was more than covered by the surplus of the preceding year, which had been taken to a Reserve Fund. In the following year the deficit was reduced to £1,200,000, and the estimate for 1929-30 was £700,000. The im-

provement in the position of the Central Government since the introduction of the reforms has to be judged in the light of the fact that, apart from minor changes involving reduction of taxation, such as the reduction in the import duty on motor-cars and the abolition of the stamp duty on cheques, they have abandoned in the interests either of the provinces or of Indian industry the whole of the provincial contributions (£7,400,000), the excise duty on cotton goods (approximately £1,300,000), the import duty on machinery and mill stores (about £600,000), and have so directed their opium policy as to extinguish the export trade in opium at an early date.

The position, then, though not without difficulties, is hopeful, especially having regard to the fact that income-tax, the assessment and collection of which has been much improved and systematized, has not yet shown the expansion which will inevitably follow in a year of really good trade. Disputes in the Bombay mill industry have been one of the principal causes preventing an expansion of revenue under this important head. The trade returns of imports and exports have, however, shown a steady improvement, and the returns from Customs duty have increased proportionately.

One important change which has affected the position has been the separation of the railway budget from the general budget. The railways now pay a contribution to general revenues based upon a formula which takes account both of the capital at charge and of the profits earned, but are entitled to place the balance of their net earnings to a reserve fund. The general revenues have under this system received on an average about £4,500,000 a year from railways, though the net railway surplus has been about £7,300,000. From the point of view of the railways it has meant a much greater freedom to develop on commercial lines, and they have been able to build up a reserve fund of £13,800,000, while at the same time effecting appreciable reductions in freights and fares. Another point of importance is that military expenditure has been standardized for a contract period of four years from 1928-29 at £41,300,000, with the object of providing during this period for a comprehensive scheme of reorganization and re-equipment in accordance with the latest experience without increasing the military budget above its present figure. Thereafter, if nothing unforeseen happens, it should be possible to effect an appreciable reduction in military expenditure. Interest charges have in recent years been much reduced, mainly owing to the conversion at more favourable rates of the greater part of the expensive borrowings of the later War period

and the succeeding years, and the provision for reduction or avoidance of debt has been systematized. This provision, as is natural, has shown a steady increase, which, however, has been less than the fall in interest charges.

This brief sketch of the financial position of the Central Government shows that the position is well under control, and, though the revenue from certain heads (such as opium) cannot be depended upon in future, a general revival of trade prosperity might be expected to produce, even at present rates of taxation, a considerable expansion of receipts from Customs and taxes on income, which represent seventy-five per cent. of the total net central revenue.

It will be appropriate to close this chapter with a general review of the debt position of the Government of India and the Provincial Governments, and the price of Government securities, as these will unmistakably show the inherent strength or weakness of the Government's financial position. The following table gives the public debt of the Central Government and the Provincial Governments and the assets held against that debt:—

DEBT POSITION AS AT MARCH 31, 1928
(In millions of £)

	Central Govt.	Provincial Govts.
Rupee debt	*429.9	107.0
Sterling debt	344.6	—
	774.5	107.0
<i>Deduct</i>		
Sums lent to Provincial Governments ..	94.8	—
Loans and advances to members of the public	9.9	27.0
Balance	669.8	80.0
<i>Assets held.</i>		
Railways	501.4	—
Commercial departments, &c. ..	15.4	86.7
Total	516.8	86.7

*Includes £23,000,000 of Post Office Cash Certificates and £24,500,000 of Post Office Savings Bank deposits.

Two things are clear from the above table. The major portion of the debt of the Central Government and the entire debt of the Provincial

GOVERNMENT AND FINANCE

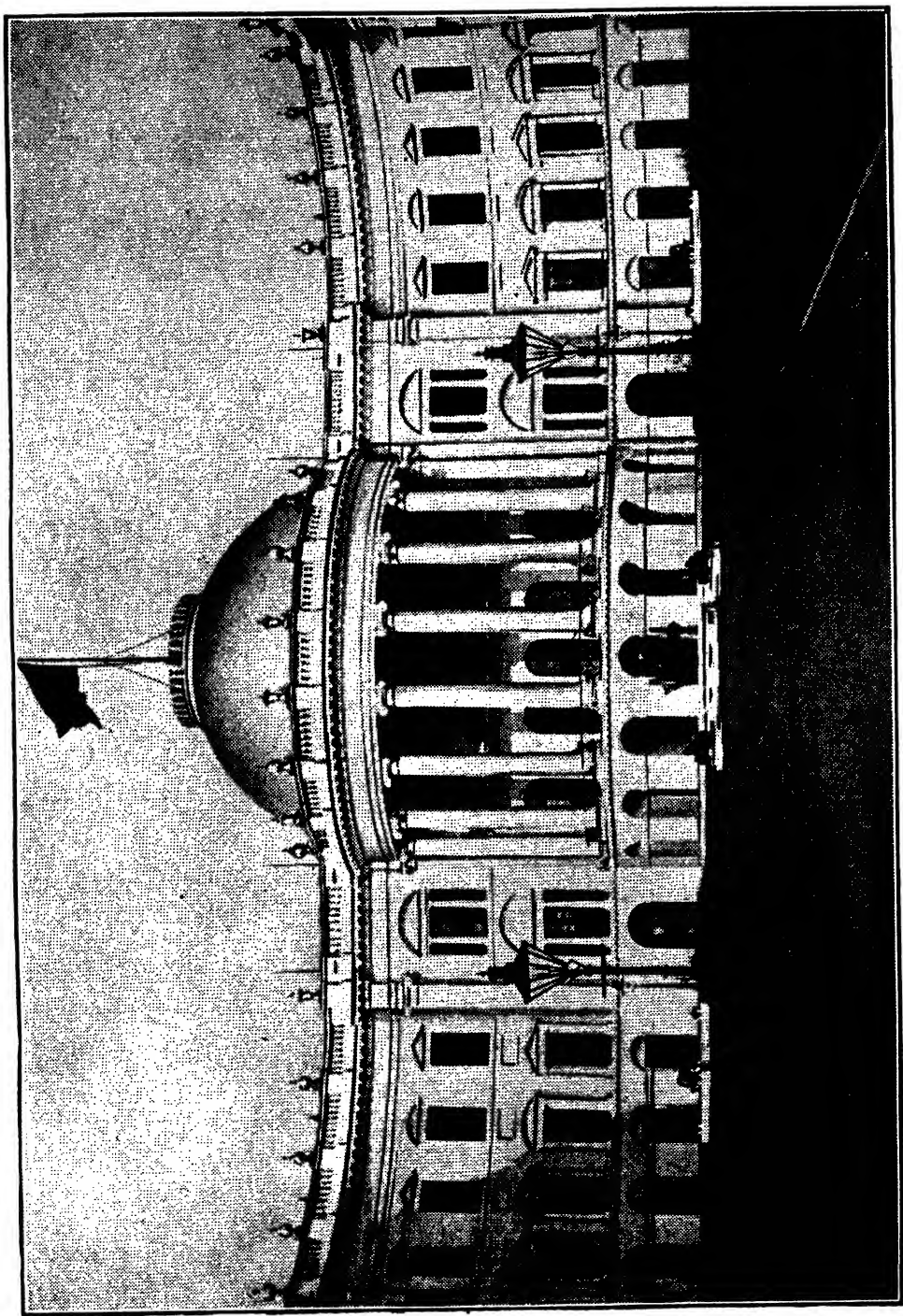
Governments are covered by valuable tangible assets. The internal debt is more than half the total debt, and this has been rendered possible by the growth of the investment habit among the people of India. In this direction no doubt much remains to be done, and it is with this object that the present Finance Member, Sir George Schuster, has instituted a comprehensive inquiry into banking conditions in India which is now in progress.

Finally, the market prices of certain typical securities of the Government of India and the Provincial Governments may be quoted:—

—	Oct. 1, 1921	Jan. 1, 1922	Oct. 1, 1929
5% tax-free loan 1945-1955	84	—	101.10
3½% rupce loan	59.4	—	68.13
6½% Bombay Development loan	—	104	107

Though there has been some reaction from the highest point reached, the improvement over the whole period covered by the reforms is striking. The credit of the Government unmistakably stands high, a fact which augurs well both for India's economic development and for her commercial prosperity.





Government House, Calcutta.

CHAPTER III

THE LAND REVENUE SYSTEM

By C. G. CHENEVIX TRENCH

Temporal power in India, from the earliest times, has carried with it the undisputed lordship of the soil, and its inheritors, whether foreign or indigenous, have never surrendered their right to a share in the produce of every acre of land under crop. Between them and the man at the plough-tail the grades of "ownership" are numerous; the land revenue in British India may be collected either direct from the cultivator, or from middlemen secure in their statutory right to realize rents from their own tenants. In parts of the peninsula, again, the demand has been fixed in perpetuity; elsewhere it is liable to periodical revision, but everywhere it is unquestioned, and to millions it is the only tax of which they are conscious. The annual land revenue of a single typical province approaches £2,000,000, or about forty per cent. of the combined revenues of the province.

The British Government in India is thus rightly to be considered, first and foremost, as a landlord, and a landlord on a scale so vast that an exhaustive review of its estate would amount to an economic survey of a large fraction of this planet's population. Its farms are provinces, its hedges the boundaries of districts not a few of which exceed in area an ordinary English county. The villages in a district generally run into thousands, and vary in size from a score or two of acres to parishes of over ten square miles. A bailiff, styled in some provinces a collector, in others a deputy commissioner, looks after estate affairs in each district. Super-bailiffs, known as commissioners, boards of revenue, and provincial governors, keep an eye on the collectors. The apex of the pyramid is the Land Revenue Department of the Government of India, its massive base an army of village accountants scattered broadcast over the Dependency.

As the Calcutta-bound traveller crosses in his train the intense chess-board cultivation of the eastern rice-tracts, chasing the level horizons, which, like skylines on an ocean voyage, weary the vision with their

far-flung monotony, he passes many a village containing 7,000 or 8,000 mapped and demarcated fields. Every field is numbered and assessed, and is the personal concern of some member of the revenue staff. Once at least in the year its area, cropping, rent, and ownership are inquired into on the spot and registered, and changes in its boundaries marked on the large-scale map of the village. From the colossal volume of information thus collected from over 500,000 villages is compiled, by a straightforward process of sifting and totalling, the annual land record.

It may be doubted whether the workshops of Empire have ever displayed a more impressive engine than this great record. That within a period measured by weeks after the close of each agricultural year an up-to-date statement of demand, remission, and arrears on such a scale should be ready for the landlord's inspection is an achievement of estate bookkeeping *in excelsis* which speaks for itself. The instructed imagination dwells with no less pride on the thought that the masters of trade, in both hemispheres, are posted as promptly in the area and prospects of every significant crop sown in the multiple millions of fields which support the rural population. But the unique distinction of the Indian land record is not its bulk but its accuracy. The widow's kitchen-garden, the aboriginal's axe-cleared plot in dense jungle, the demesne lands of the zamindar whose oil-driven water-lifts and tractors employ a staff of skilled mechanics, all are annually visited by the village "Patwari" and their details recorded. Here is no room for the plausible "assumed figure," that dry-rot of fair-seeming statistics. Errors, doubtless, there are, but it is certain that their effect on the whole is negligible. From time to time the normal course of the land record is convulsed by a disturbance called settlement. The necessity for making or revising a settlement arises from the following considerations. The uncertainty of the monsoon is a recurring nightmare to rulers and ruled alike, for even a short run of bad seasons, unless immediately countered by sedulous nursing, may lead to serious and widespread impoverishment.

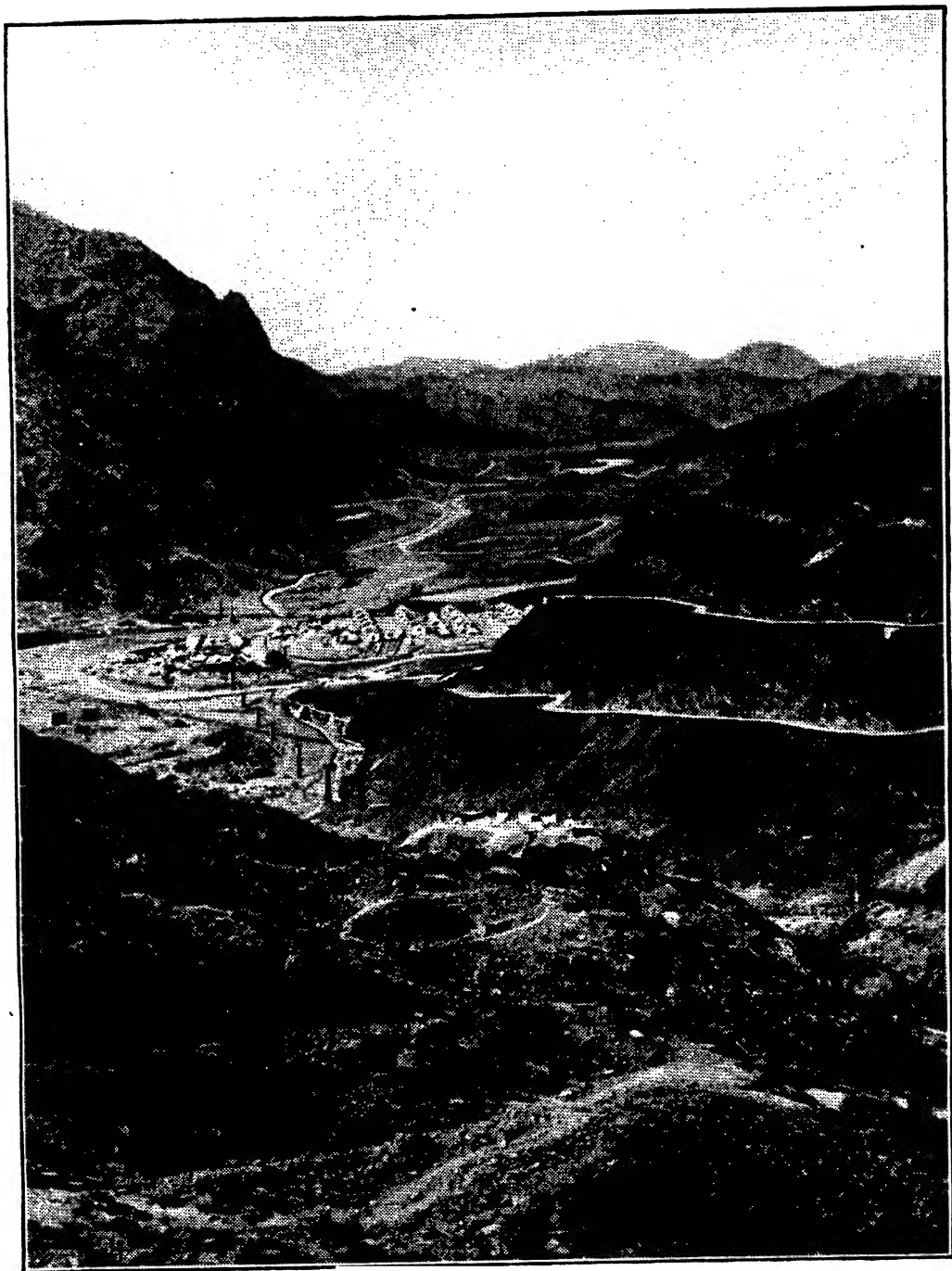
Other special causes of the instability of agriculture in India are salty efflorescence, the spread of the terrible káns grass, and sudden changes in the flow of great waterways. Cancerous deserts and shallow river-beds are for ever gnawing into the tilled lands along their fringes. Always, somewhere in the peninsula, the retreat of a rearguard is in progress, the outposts of the ploughing men are falling back. His well choked and his fields blanketed by driven sand, some peasant is to-day

loading his household on cart or camel and bidding an eternal farewell to the home of his fathers :—

Pellitur paternos
In cinu ferens deos
Et uxor et vir sordidosque natos.

But in most sectors of the battle-front the line advances to attack and victory. The unresting labours of the irrigation engineers turn the wilderness where no man dwelt into a standing water. Then tenants pour into the empty spaces, the raw new villages grow into towns, and a thousand problems of administration and assessment arise. Elsewhere new roads and railways are penetrating land-locked, populous tracts where formerly grain was unsaleable after an abundant harvest, and in bad years the people went short of food. Local prices, in consequence, fall into line with the rates of the world's markets; pockets and stomachs are filled. On the one hand justice, on the other the fiscal importance of the land revenue, compel the Indian Government to keep pace with the continual fluctuations in land values, raising, lowering, or redistributing the State demand as agricultural conditions change. This operation, together with its linked activities, is called a settlement.

A typical settlement covers a whole district, and the settlement officer's first business is to prepare an expanded and dead accurate land record, after resurvey of the fields and appraisalment of their soils and water facilities. He builds on this foundation, aware from sundry warning ensamples, ancient and modern, that faulty spade-work spells future disaster. He then writes the village Customs paper, and in the process finds himself repeating, with astonishing similarity of detail, the clauses of a medieval English manor roll. The task of assessment, or rent fixation, is next taken in hand, in which critical and momentous operation his proposals at every step run the gauntlet of expert check by seniors who have themselves been through the mill. Lastly, after perhaps five years of strenuous work in field and office, comes the announcement to the assembled cultivators of the sanctioned rents, field by field, holding by holding. These are anxious days for the settlement officer. But he has behind him the loyal backing of the village elders, persuaders of men, powers in their countrysides. "Tis a fair settlement," they tell him, "and, please God, it will outlast our time and our children's." On the cooperation and verdict of these assessors, a verdict as final as it is free, hangs the great land revenue system of British India.



Landi Khana, the terminus of the Khyber Pass railway and the last British post before the Afghan border is reached.

CHAPTER IV

THE DISTRICT OFFICER

By R. G. GORDON

TO the District Officer in India the chief fascination of his life and work lies in the "infinite variety" of the scenes among which his lot is cast. In the Bombay Presidency, for example, he may at one period find himself in Sind, a desert of sand save where the canals of the mighty Indus bring fertility to the soil and where the temperature in the hot weather may run up to 120 in the shade, and where the duck-shooting is the best in the world; at another time he may find himself in Gujarat, a fertile plain of alluvial soil whose mango groves made a writer a hundred years ago compare the appearance of the countryside to that of the park of an English nobleman; or he may be sent to the Konkan, a rice-growing country down to sea level with a rainfall of 150 in. per annum. He may be transferred above Ghats to serve in a district on the Deccan plateau, where in the forests of Khandesh he may shoot the tiger, the panther and the bear; or he may go to the fertile Southern Maratha country and shoot big game there and small game as well, or below Ghats again to Kanara, where the bison and the elephant still roam the primeval forests.

Equally varied is the kaleidoscope of human nature which is presented to him, ranging from the polished Brahmin, learned in all the wisdom of the West, down to the wild tribes of the Konkan, with their weapons the bow and arrow, and their food in hard times the berries from the forest trees. Between these extremes comes an infinite jumble of castes and creeds, of languages and dialects, with most of which at one time or another the District Officer comes in contact and which afford problems for his solution.

Equally varied, too, are the duties which the typical District Officer, the Collector and District Magistrate, as the head and centre of the district administration, finds himself called upon to perform. As "Collector" he is responsible for the due collection of the land tax or

assessment, which, placed upon every acre of land, is the main source of the Provincial revenue, and also for the elaborate system of village accounts and the records of title upon which the accounts are based. In times of famine he has to make arrangements for the suspension of the collections and for the relief of the distressed. As "District Magistrate" he is responsible for "the peace and good order of the district," an elastic phrase which covers not merely the suppression of ordinary crime, but the prevention of riots and disturbances, the regulation of fairs and processions, and intervention in the religious and political disputes which have become such an unfortunate feature of Indian life in recent years. In the same capacity he is the chief Magistrate of the district and responsible for the work of the twenty or thirty magistrates who work under him.

In addition to these duties he has to supervise the work of the Excise Department, to issue all licences, and to sell road tolls; he has to manage the estates of minors as the Court of Wards; he conducts the elections of the Members of the Legislative Council and the Assembly and Council of State; he has to keep general supervision over the work of the Municipalities and Local Boards, and, finally, if there is an Indian State attached to his District, he acts as Political Agent and is the intermediary between the Chief and Government. The possession of these wide administrative powers brings him into close touch with every branch of the administration, whether it be agriculture, forests, irrigation, cooperation, education, or whatever it may be. In addition to this he is expected to be a member of every committee and to take an interest in every charitable organization; to open schools and hospitals, to lay foundation-stones, and to head every subscription list: in short, to be everywhere and to do everything.

Such a range of multifarious duties can only be carried out by an officer who is in personal touch with every part of his charge; so from November to March the Collector is on tour, inspecting offices, checking accounts, visiting villages, hearing the grievances of the cultivators on the spot and remedying them so far as may be. Ordinarily the work of administration may proceed smoothly enough, but the District Officer must always be prepared for any emergency. The crops may fail owing to lack of rain, to floods or frosts, or the attacks of locusts and insect pests, and arrangements must be made for relief. Agrarian troubles may arise between landlords and tenants, calling for his intervention. A religious quarrel may suddenly break out between Hindus and Mohamedans over some temple or mosque or religious procession,

or an actual riot may occur. The political situation may suddenly become threatening and need careful handling. A local officer may be accused of corruption and inquiry may be necessary. A municipality or the Local Board may pass the bounds in inefficiency and misgovernment and have to be dealt with. Or the Chief of the attached State may die suddenly, so that the Collector has to rush down, take charge of the State jewelry and cash before they are made away with, and arrange for the administration.

The life in the District is often a solitary one. For a month or more at a time he may be thrown upon his own resources for amusement in his leisure hours, and hot weather in camp spent in solitude with the thermometer at 110 in the shade can be very trying both to health and temper. But there is compensation for solitude during the rains, when District Officers of all grades forgather in the headquarters station and the evenings at the Club are occupied with lawn tennis or golf, with billiards and bridge, dinners and dances.

In the eyes of the people the position of the District Officer as the representative on the spot of the "Sarkar" is still a great one and, all things considered, it is astonishing how comparatively little his prestige has been diminished in spite of political agitation. What his future will be none can say, but it is difficult to see what agency within any reasonable period is to take his place, and it is even possible that the grant of extended powers of self-government to India, instead of undermining, may strengthen his position as the one firm rock of the administration amid the weltering sea of party strife.





**Field-Marshal Sir William Birdwood, Commander-in-Chief in
India since 1925.**

PART III

THE DEFENCE FORCES

CHAPTER I

THE INDIAN ARMY

The armed forces in India are under the Commander-in-Chief, and consist of British troops, units of the Royal Air Force, the Indian Regular Army, the Auxiliary Force, and the Territorial Force. In addition there are the Indian State Forces. The British troops include five cavalry regiments, sixty-five batteries of artillery, forty-five battalions of infantry, and eight armoured car companies. There are eight air squadrons, with the necessary reserve machines, park, repair workshops, &c.

The Indian Army consists of cavalry, mountain artillery, engineers, signal corps, pioneers, infantry and ancillary troops. Its establishment consists of approximately 240,000 Regular troops and 40,000 combatant reservists. As was shown in the Great War, during which India sent over 1,250,000 men oversea, the Indian Army is capable of great expansion. The Indian Infantry alone includes no fewer than twenty different classes, and as there are a number of additional classes in the Cavalry, Mountain Artillery, Indian Army Service Corps, and other branches, the heterogeneous character of the Indian Army can be imagined. In June, 1929, before certain reorganizations and reductions that have since been carried out, there were 416 infantry companies; of these 277 were Hindu or Sikh, 127 were Musulman, and twelve Burman. The proportion is still practically identical. In the cavalry there are thirty-nine Hindu-Sikh and twenty-four Musulman squadrons. It is, therefore, roughly correct to say that two-thirds of the Indian Army is Hindu or Sikh and one-third Musulman. Rather more than half come from Northern India—*i.e.*, from the Punjab and the North-West Frontier Province, while approximately one-quarter are hillmen from Nepal, Garhwal and Kumaon, thus leaving less than one-quarter to be found from the whole of the rest of India.

There are no British N.C.O.s in the combatant units, except in

sapper and miner companies. A battalion has an establishment of twelve British (or Indian King's Commissioned) officers—Gurkha battalions have thirteen, including one extra for the training company—and twenty Indian officers (with Viceroy's Commissions), the latter acting as platoon commanders. This system works extremely well, and has stood the test of many years and many wars. Incidentally it is a great tribute to the energy, ability, and power of leadership of the British officers.

The Auxiliary Force, raised from European and Anglo-Indian British subjects, and enrolled for local service only, consists of units of all arms, with a total strength of about 36,000. The Indian Territorial Force, purely Indian in composition, includes eleven University Training Corps, four urban units in process of formation, eighteen provincial battalions, and a Medical Branch, with a total strength of about 19,000. The provincial battalions are affiliated to Regular infantry battalions and are liable to general service in India, or in emergency to service beyond the Indian frontier; and these battalions, commanded by picked ex-C.O.s of Indian Army battalions, would be of real value on mobilization. The liability of the four urban units only extends to service within the province in which the unit is situated, while the members of the University Training Corps have no liability whatever.

The Indian State Forces are the troops maintained by the rulers of Indian States. They include units of all arms, with a total strength of about 45,000. In the past many of these troops presented a most picturesque appearance, but their training and equipment were out of date. Most of the picturesqueness has now departed, and the great majority of units are armed and equipped on the same pattern as the Indian Regular Army, and their training is good and efficient. In times of emergency most rulers have spontaneously and generously placed their troops at the service of the King-Emperor. In the Great War they served with great credit in France, East Africa, Palestine, and Mesopotamia.

The Army in India is divided into four Commands, Northern, Eastern, Southern, and Western, and the Burma Independent District. About twenty-five years ago Lord Kitchener, realizing the necessity of rapid concentration to meet external invasion, caused its centre of gravity to be shifted farther north, ready to deal with the warlike frontier tribes and to meet aggression from the North-West.

It may not be fully realized that although the Indo-Afghan frontier was fixed by treaty as long ago as 1893, and the Amir Abdur Rahman

took immediate steps to extend his sway up to the frontier on the Afghan side, large tracts of country on our side remain unadministered. This policy, now regarded by many as a serious error, results in our having to keep about one-third of our Army on the North-West Frontier to guard our territory against our own tribesmen.

Indian troops, under British leadership, have fought over the greater part of the world, in Egypt, Abyssinia, Somaliland, Persia, Afghanistan, on the North-West and North-East Frontier of India, Tibet, China, and, in the Great War, in France, Belgium, East Africa, Gallipoli, Palestine, Mesopotamia, Asia Minor, and Russia. Nor must we forget how the Meerut and Lahore divisions helped to stem the German advance at a very critical time in October and November, 1914, nor that in 1917 and 1918, while the British, French, and other Allied armies were engaged in the decisive struggle with the Germans in France and Belgium, Indian troops were bearing the brunt of the important operations in Palestine and Mesopotamia which eventually destroyed the Turkish armies and brought Turkey to her knees.

In spite of its heterogeneous composition, its arms have, with few checks, been victorious in all its campaigns. Its moral stands as high as ever at the present time, and its fighting efficiency, though of a somewhat different character from that of a European Army, has reached a high standard. With so many races and classes, and with the difficulties of country, distance, and climate, conditions naturally differ widely from those obtaining in England; and although training and efficiency are paramount, it is wisely recognized that they must be based on good will and contentment.

With the development of roads and railways, and the advance in science and civilization, many picturesque features have disappeared from the Indian Army. Bright colours, trappings of gold and silver, have gone, especially on field service, and the elephant no longer exists as a member of the Army. And yet the glamour has not gone from the Indian Army; there are few finer sights, to the eye of a soldier, than an Indian cavalry regiment, with its supple and loose-limbed riders, who sit their horses with an easy grace and look as if they had been born to the saddle; nor can anything more workmanlike be imagined than a Punjabi battalion on the march, or Gurkhas in the hills. Nor is there a finer career for a real man, or one more important at this juncture for the welfare of India and the Empire as a whole, than that of an officer of the Indian Army. His pay may not be munificent, but it is adequate, and his life is spent among splendid men, with opportunities for sport,



A Cavalry patrol in the Khyber Pass.

riding, polo, shooting, and games such as exist in no other profession. Although he has plenty of work to do it is mostly outdoor and of a nature that must appeal to every true soldier.

Horses are imported from Australia in considerable numbers, but the Indian country-bred is a fine animal, hardy and well adapted for service under Indian conditions; its breeding is receiving every encouragement from Army Headquarters and from the Government of India. The mule is still of great military value, both for supply purposes and for first-line transport with troops and for mountain artillery, and will always remain so for work in the mountainous country along the Indian frontier, from Siam to Persia. The bullock has disappeared as an Army transport animal, and his passing is unwept and unmourned; but the camel is still of use for supply purposes in desert and mountainous country where there are no roads.

Mechanization is making steady progress, and mechanical transport has been developed considerably in the last few years, but in view of the main role of the Indian Army—the defence of the Indian frontier—and the difficult and mountainous *terrain* involved, it is obviously impossible for the mechanization of the fighting troops to be on the same lines as in the case of an army required for operations in Europe.

Drawn as they are from many races and from a vast area of recruitment, it is natural that the component parts of the Indian Army should vary greatly in characteristics. Those enlisted in the combatant branches are all of the fighting classes, and are agriculturists almost to a man. In former days caste prejudices were a serious handicap to efficiency; but although the Army includes a strong contingent of high-class Hindus, these prejudices have been considerably modified, and most classes sink them almost entirely on active service.

The Indian soldier is, in general, easy to deal with, of good physique, a fine marcher, and fond of sports and games. There is little "crime" or indiscipline in an Indian unit, and Indian soldiers appreciate very greatly the impartiality and fairmindedness of their British officers, in whom they place implicit trust.

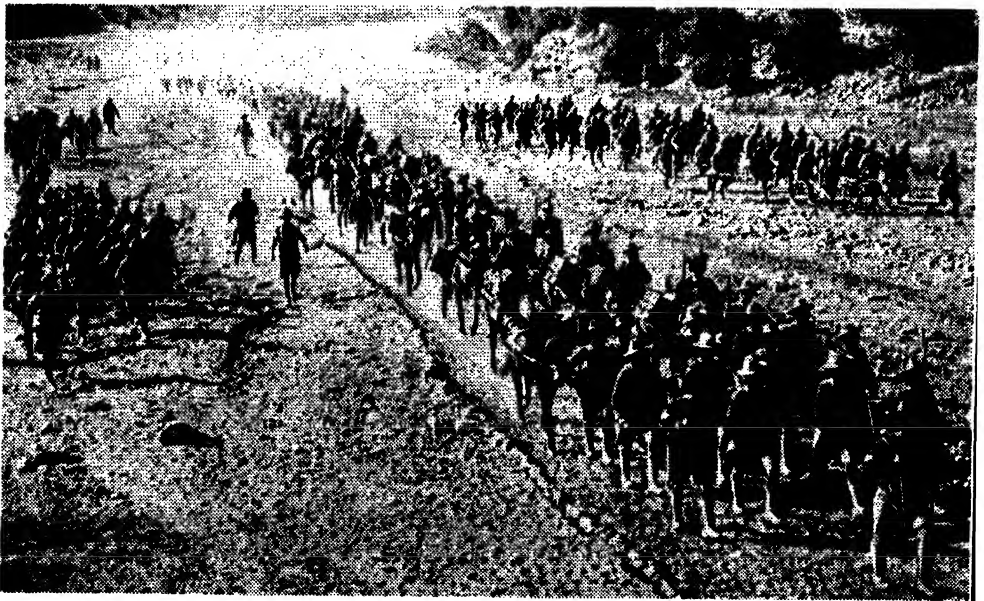
Service in the Army is popular and there is no lack of recruits, although military service is no longer quite as attractive to certain classes, especially Sikhs, whose prosperity has been increased by canalization measures or who are beginning to turn their attention to industrial pursuits. Indian troops make fine soldiers. Their natural martial qualities are rapidly developed under military discipline and good leadership. Being mainly agriculturists, they come of good, sound

INDIA

country stock, taking little interest in politics and not easily moved by the appeals of the professional agitator.

It may be of interest to give a brief sketch of the characteristics of the principal races of the Indian Army, taken in order of their numerical strength.

The Punjabi Musulmans are very fine soldiers, who did extremely well in the Great War; cheery, active, hardy, of good physique, sport-loving and endowed with a sense of humour. The Gurkha troops, recruited from the independent State of Nepal, have served in the Indian Army for over a century. They are mainly of Mongolian origin, though with an admixture of Rajput blood, short in stature, but sturdy and strong. Gurkhas are born soldiers and fought magnificently in the Great War. They are cheery and friendly, with a strong sense of humour; keen sportsmen and fond of games, especially football. They get on particularly well with British troops, whose characteristics they share in a marked degree. The Sikhs are mostly of Jat origin, with their religious centre in Amritsar. They are recruited almost entirely in the Punjab. The principal Sikh class—*i.e.*, the "Singhs," or followers of the Tenth Guru, are not allowed to smoke or cut their hair. So practically



Gurkhas on manoeuvres.

all Sikh soldiers wear beards, sometimes rolled up on a string. The Sikh religion is Hindu in tendency. The Sikhs are a martial race of good physique, and make fine soldiers. They have rendered great services to the Indian Army for nearly eighty years.

The Dogras, also known as Hill Rajputs, inhabit the Kangra Valley and the hilly country between the rivers Ravi and Sutlej. Dogras are high-caste Hindus, of martial character, with fine soldierly qualities. In peace time they are honest, law-abiding, and of attractive manners; in war they are first-class fighters and did very well in the Great War.

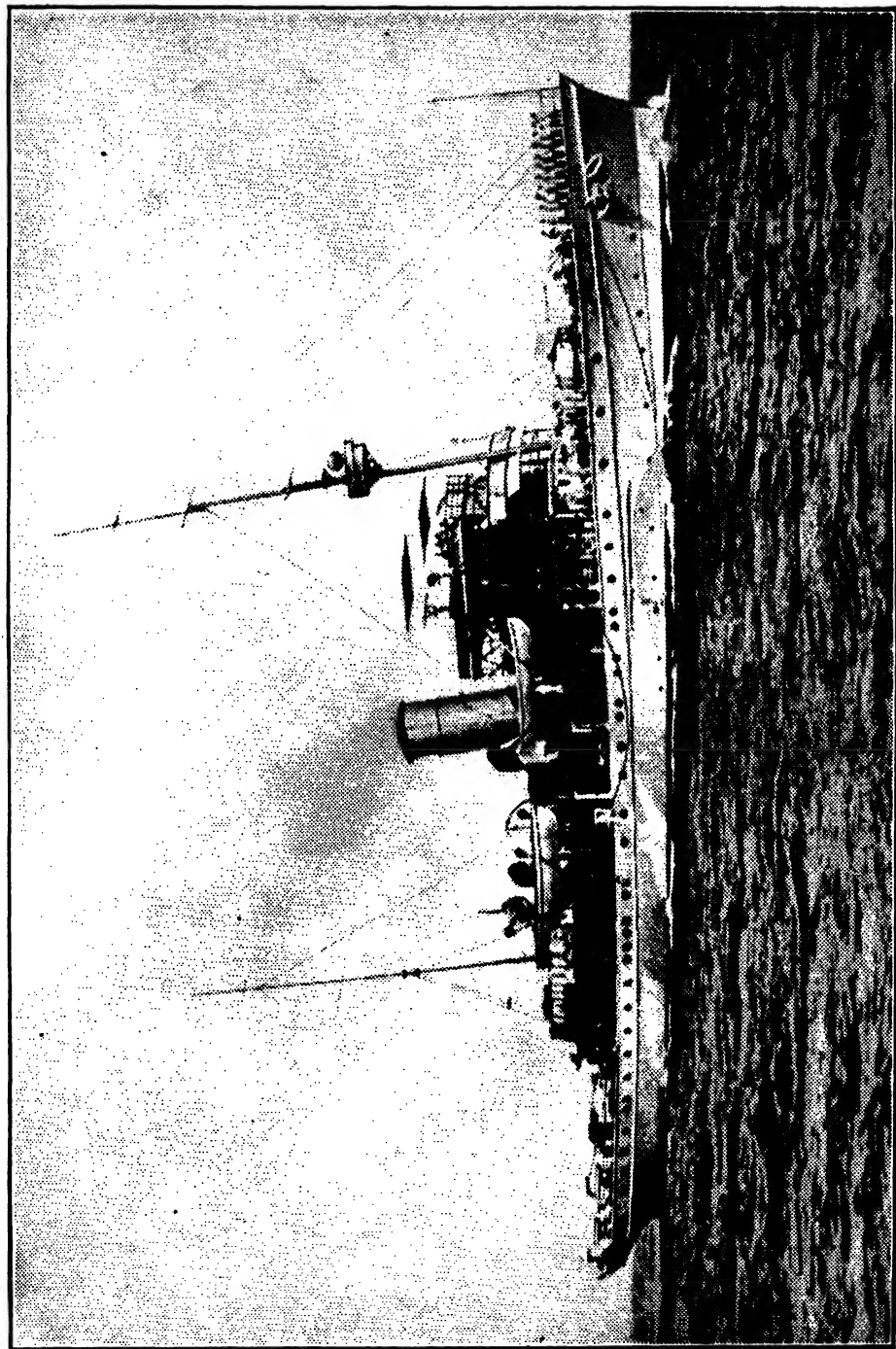
The Rajputs are a fine warlike race whose chief occupation for centuries has been fighting. They are mainly high-caste Hindus, but there are also Musulman Rajputs, converted from Hinduism. In addition to the thirty Infantry Companies and twelve Cavalry Squadrons in the Indian Army, a large proportion of the Indian State Forces are Rajputs.

The Jats are also high-caste Hindus, inhabiting the South-East Punjab, the north portion of the United Provinces, and Rajputana. They are mainly agriculturists of the yeoman type; big men of strong physique; good farmers, and determined fighters, who did uniformly well in the Great War.

The Pathans are Musulmans from the North-West Frontier Province, whose clan and natural soldierly qualities make them good fighters. Enlistment from trans-frontier tribesmen—*i.e.*, from those living in the so-called "Independent" zone between our administered frontier and the Durand Line, has been almost abandoned as the result of unfortunate experiences in the Great War, when these men proved untrustworthy owing to religious influences.

The Mahrattas are Hindus from the hills of Western India, whose ancient reputation as gallant fighters and warlike raiders was revived by their fine exploits during the Great War, especially in Mesopotamia.

Among the other fighting races it is impossible to omit the Garhwalis and Kumaonis. They come from the mountainous country in the east of the United Provinces, and make excellent soldiers; the Garhwalis, in particular, earned renown in every theatre of war in which they were engaged from 1914 to 1921.



R.I.M. Sloop Clive: Flagship of Rear-Admiral H. Walwyn, C.B., D.S.O., Flag-Officer Commanding the Royal Indian Marine.

CHAPTER II

THE ROYAL INDIAN MARINE

By CAPTAIN SIR EDWARD HEADLAM, R.I.M. (retired).

The Royal Indian Marine is the Indian Naval Service, and as at present organized the duties are chiefly for the defence of Indian seas, coasts, and harbours, but it is also liable for service elsewhere as part of the Naval forces of the Empire.

The service is of ancient origin and dates back to the earliest days of the East India Company, when the opposition of the Dutch and Portuguese, together with persistent piracy on the Western Coast, necessitated the establishment of Naval forces in India. The first two ships were the *Dragon* and *Hoscander*, under one Captain Thomas Best, who arrived in Surat in 1612. Since that date, with various titles and under varying conditions, there has always been a sea service under British Government in India.

Bombay is the headquarters of the Service, and has been so since 1670, when in that port a dockyard was constructed for shipbuilding, and where, in the latter part of the eighteenth century and the beginning of the nineteenth century, apart from building the ships required for the Indian fleet, many important ships were built for the Royal Navy, perhaps the best known of which was H.M.S. *Ganges* (ninety-two guns), which served as flagship to Sir Edward Codrington at the battle of Navarino. The success of the shipbuilding was due to the discovery of the value of teak as a substitute for oak and to the great skill of the Wadia family as constructors. The first of the family was Larji Nasarwanji Wadia, who came down from Surat to select the site for the dockyard and whose family for over a century were in charge of the building of Naval and other vessels in the Government dockyard. Hydrography has always been an integral part of the service from the earliest days of British occupation in India, and the work of the Indian Marine Surveyors has extended from the Red Sea and East Coast of

Africa round the Persian Gulf and Coasts of India and Burma to the Straits of Malacca.

The war services of the Royal Indian Marine include continuous warfare against the pirates who infested the Indian Seas in the seventeenth and eighteenth centuries; warfare against the Dutch, the Portuguese, and the French; the China, Persian, Burmese, and New Zealand wars; the Indian Mutiny; the Egyptian, Abyssinian, South African and Somali campaigns, and the Great War.

The Royal Marine Service now consists of four sloops, two patrol vessels, four minesweeping trawlers, two surveying ships, a depôt ship for training purposes, and a dockyard.

The Service, which has a *personnel* of about 100 officers and over 1,000 men, exclusive of the civilian staff in the dockyard, is commanded by a Rear-Admiral in the Royal Navy with the title of Flag-Officer Commanding and Director of the Royal Indian Marine. The ships fly the White Ensign and White Pennant of the Royal Navy, with the flag of India and a Blue Ensign bearing the Star of India as a distinctive mark at the bow. The officers have always been British, but the commissioned ranks are now open to Indians. The crews, warrant officers, petty officers, and men are all Indians, and until recently were all recruited from the Ratnagiri district south of Bombay. Recruiting, however, is now open to the whole of India. The future expansion of the Royal Indian Marine must march with the development of India among the Dominions of the Empire, and we may be assured that the Service will worthily uphold the great traditions of its past history and maintain an honourable position among the Naval forces of the British Empire.



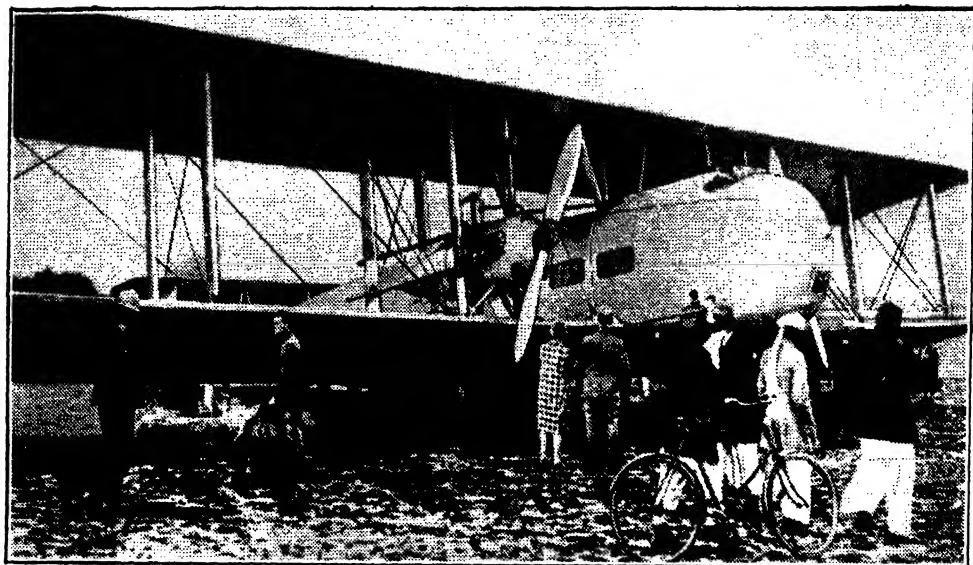
CHAPTER III

THE ROYAL AIR FORCE

The beginning of the Royal Air Force in India dates back to the years immediately preceding the Great War, when it was decided to establish a Central Flying School at Sitapur, a station some fifty miles north of Lucknow, and to maintain a squadron near Peshawar. While these units were in process of formation the War broke out, and such *personnel* as could be spared was dispatched to Mesopotamia and Egypt. A Flight from India proceeded to Ismailia, on the Suez Canal, and in 1915 did effective work in reconnaissance against the Turks. In Mesopotamia a Flight, which developed into a Squadron, had a place with the expeditionary force that went out from India. As the War progressed these Flights were gradually absorbed into the Royal Flying Corps organization from home, and in their place in India a Squadron was formed at Risalpur, near Peshawar. The Mesopotamian Squadron returned to India after the War and was stationed on the frontier.

The strength of the Royal Air Force in India now consists of eight Squadrons and a Flight of heavy transport aeroplanes. Seven of the Squadrons are extended over the North-West Frontier from Risalpur to Quetta, and one is stationed at Amballa. The force has until lately mainly been working with aeroplanes of the D.H.9A type and Bristol fighters. It is now being re-equipped with the new Wapiti general purpose machines. The service provides a spice of adventure which is lacking in the homeland. There are the climatic stresses to which material is subjected; the blinding sandstorms met with over some of the Indian plains; and flights over the mountains in Northern India, comparable with the Alpine crossings about which we sometimes hear so much.

Since 1925 the Royal Air Force has rapidly and successfully dealt with a variety of tribal disturbances on the North-West Frontier, and thereby given the civil authorities a strength in controlling the wild and



Air rescues from Kabul in the winter of 1928.
An R.A.F. machine in the Afghan capital.



Arrival of Lady Humphrys, wife of the British Minister, at Peshawar Aerodrome.

uncivilized tribes in that region which they have never before possessed. It is in the memory of all how, in December, 1928, machines of the Indian Force, reinforced by others from Iraq, improved their traditions by the splendid manner in which they brought out from Kabul 586 men, women and children of all nationalities. This exploit, carried out in mid-winter over the tops of lofty mountains, with snow on the ground at the Kabul end, and without the loss of a single life, is one of the finest flying achievements in the annals of any air force in the world.

The Royal Air Force in India is under the Commander-in-Chief. The Air Force Budget is incorporated in the Military Estimates. But the Air Officer Commanding in India is an Air-Marshal who has his own separate staff, and the Force is organized in conformity with that at home, so that Squadrons are interchangeable, and both could co-operate without difficulty in time of war. Military operations in this modern age are more than ever a matter of communications. This is specially the case in India, where railways and roads are less developed than in the advanced countries of the West. Lack of water also frequently complicates the situation. India extends over 2,000 miles from north to south and over a somewhat greater distance from east to west. The service aircraft now at the disposal of the Commander-in-Chief could accomplish the distance in either direction in two days, including a twelve-hour rest at night. Landing-grounds are divided into three classes—namely, those bought or made by the Royal Air Force and belonging to it, civil aerodromes, and military parade grounds made available to airmen. In this manner grounds exist throughout India at such frequent intervals that every part of the country is within a radius of 250 miles from one or other of them.

India lies athwart the great Imperial air route to Australia, which runs from Karachi to Calcutta, Rangoon and Victoria Point. Although at present no threat, so far as India is concerned, would appear to be possible against this line, which will form a vital link in our chain of Imperial communications, its defence cannot be neglected and will always be an obligation upon the combatant Air Force at the disposal of the Government of India. The great range of modern aircraft and the constant improvement in technique may result in developments of which we have, at present, little or no conception. Although we now think in terms of 500 miles as the ordinary limit in a range of service aircraft, the day may come when this distance will be doubled or trebled, and the problem of security will then bear a different complexion.

The establishment of an Indian Air Force has been proposed. Indian pilots in the Great War were few in number, for they served as volunteers with the Royal Air Force manned in England, but they established a good record of achievement, and this is a basis of considerable confidence among Indians as regards the future of Indian flying. His Majesty's Government and the Government of India cordially responded to this new aspiration of Indians, and less than two years ago Cranwell, the training ground for cadets for the Royal Air Force in England, was opened to Indians. The two Governments announced their intention to establish an Indian Air Force, and the Commander-in-Chief, in giving this information in the Legislative Assembly, observed that the number of Indian cadets in training at Cranwell "would have to depend on the success or otherwise of the Indian Government in producing enough of them to make possible the formation of an Indian Air Force." The number of Indian candidates for the course at Cranwell has not, so far, been large, and if the general desire of Indian leaders that civil flying in India shall be manned by Indians is to be realized, it seems probable that the recruits will have to be drawn largely from the combatant Air Force of the country.



PART IV

ADMINISTRATIVE SERVICES

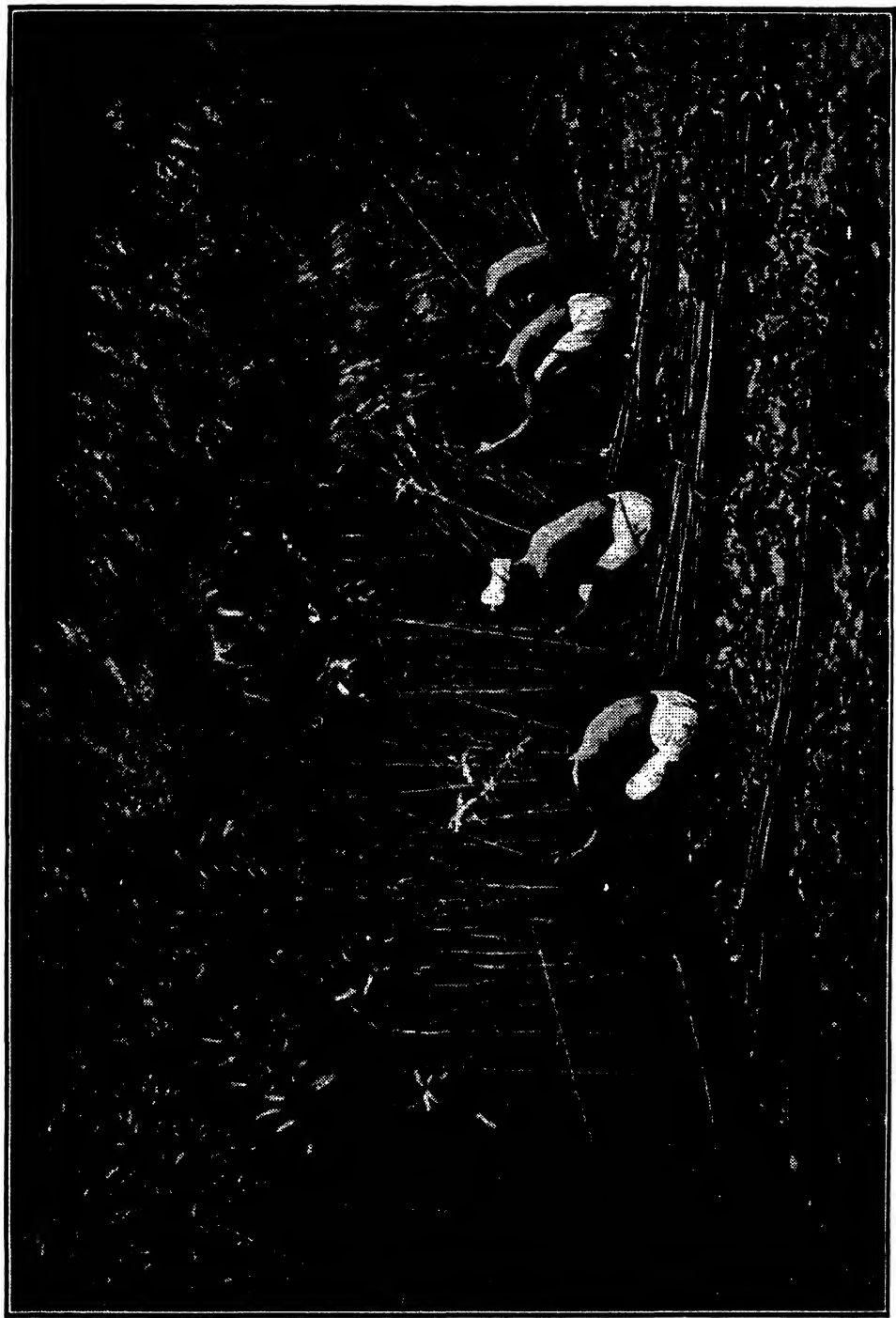
CHAPTER I

AGRICULTURAL RESEARCH

By B. C. BURT, Agricultural Expert, Imperial Council of Agricultural Research

THE actual cultivated area in India is some 500,000,000 acres, most of which is arable land, and three-quarters of the population of 400,000,000 is directly dependent on agriculture. The livestock of the country, mainly cattle, number some 300,000,000. In addition to specialities such as tea, jute, coffee, and spices, India is one of the world's greatest producers of such crops as rice, cotton, wheat, oil-seeds, sugar, and fibres—her agriculture being primarily designed to provide most of the food, and much of the clothing, for a dense and predominantly rural population. The most striking feature of Indian agriculture is the bewildering number of crops grown. When tea is being plucked in South-East India, the orchards of the Himalayas are yielding typical English apples, and when the Madras *ryot* is picking his cotton, the gardens of Delhi and Lucknow are ablaze with annuals and stocked with familiar English vegetables. This diversity of cropping is due not only to a wide range of climate—tropical, sub-tropical, and temperate—but to the fact that double cropping is everywhere common and that throughout the greater part of the Indo-Gangetic plain there are two distinct cropping seasons. In the so-called “winter” most of the crops of temperate climes, such as wheat and barley, are grown; in the summer typical tropical crops are in evidence. For each individual crop the season is short. This fact has an important bearing on agricultural improvement, since, for example, varietal improvement can rarely be attained by the importation of exotics, but must be achieved by patient plant-breeding on the spot.

The dependence of Indian agriculture on the behaviour of the monsoon is an accepted axiom, despite the fact that millions of acres of crops are now irrigated annually. The date of the onset of the monsoon largely determines the area which can be sown with summer crops, while its distribution determines both the yield of these crops



Cutting jute in Bengal.

and the area which can be sown with winter crops; the latter are largely raised by "dry-farming" methods even where supplementary irrigation is utilized.

The agriculturist is as variable in type as the climate, for many races and peoples contribute to the rural population of India. Land tenure systems vary greatly. Large estates with numerous tenantry and small cultivating proprietors exist side by side, and every grade between these two extremes is met with. But the economic condition of the actual tiller of the soil varies only in degree; tenancy rights and the laws of inheritance bring cultivating proprietors and tenants on to one plane, and India is essentially a country of peasant agriculture. Farms in the Western sense are practically unknown; enclosures hardly exist, and the "broad-field" system of agriculture is common. Though generally illiterate, the Indian peasant is skilled within the limit of his small resources, and his willingness to take up new methods of proved value, provided that they are within his means and are properly demonstrated, has made possible the important advances which have taken place.

The need of good seed is generally recognized, and the Agricultural Department's earliest successes were in the substitution of superior for inferior strains of crops. It is now estimated that the total area under improved varieties exceeds 10,000,000 acres, although many important areas and crops have not yet been touched. Owing to the great difficulty of gauging the natural expansion of a popular crop, and to the fact that the returns available do not include some of the department's earliest successes, this figure is undoubtedly an underestimate. For example, less than 400,000 acres are reported to be under improved varieties of ground-nuts, a leguminous oil-seed of great economic importance. In point of fact the agricultural departments may claim credit for practically the whole of the 5,500,000 acres now under this crop. Progress has not been uniform. Of the 24,000,000 acres under wheat in British India 3,500,000 are now under improved varieties of high yielding power, resistant to rust and yielding strong flours.

Of the 18,000,000 acres under cotton 3,250,000 are under improved kinds, some of which are superior only in yield, while others are of greatly improved staple. Incidentally, the character of the exportable surplus of Indian cotton has been largely altered. Indian production of medium-staple cotton has increased by about 1,000,000 bales since 1917, some 500,000 bales of this increase being cotton of about 1 in. in staple. This is a fact of some significance at the present

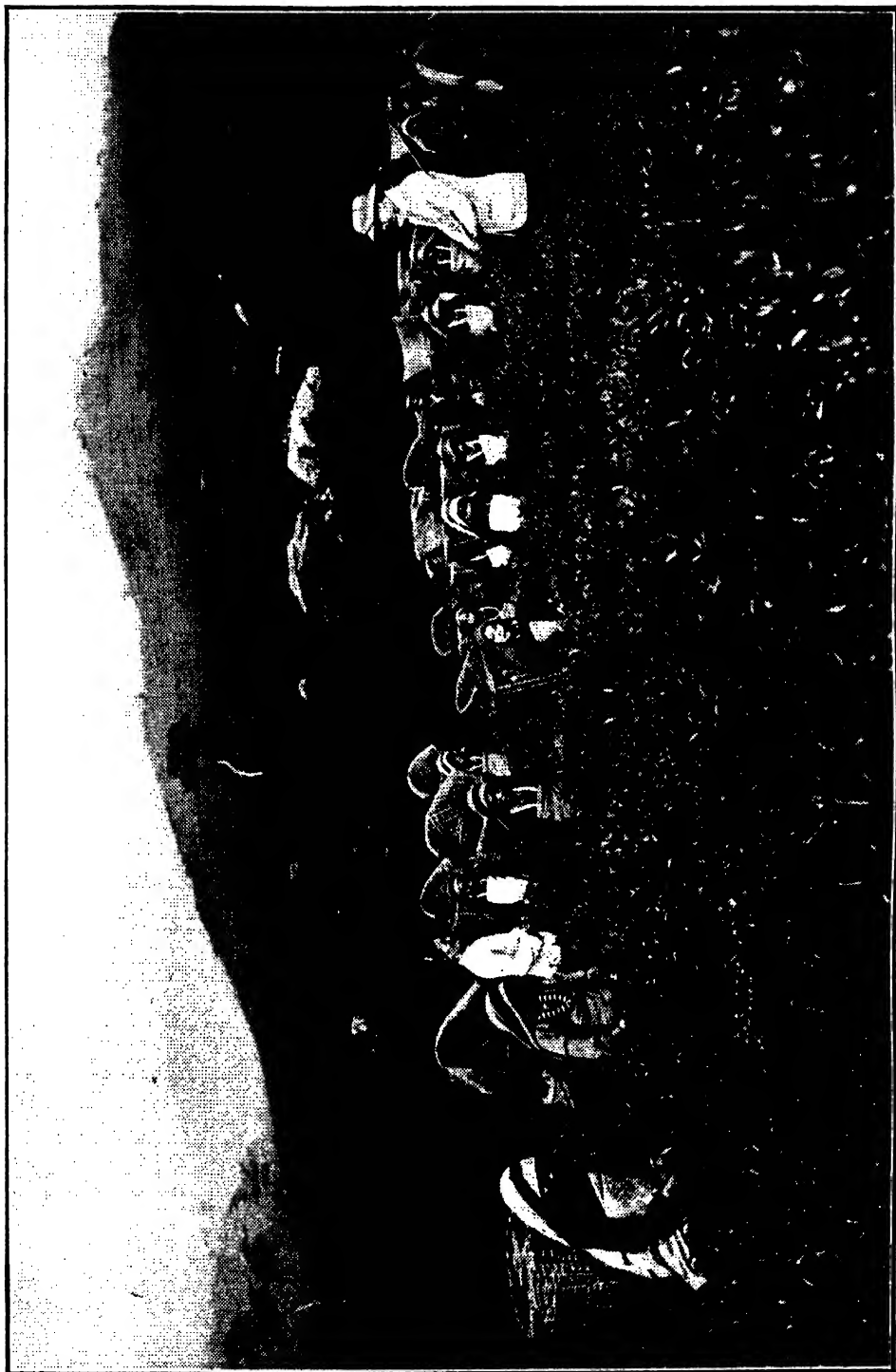
juncture, when the Lancashire cotton industry is undergoing reorganization. At present Japan is India's principal customer for her best cottons as well as for the more familiar short staple cottons.

Progress in the improvement of the Indian rice crop, the greatest of all food-crops, has been slower, for work started later and the problems were difficult; but over 1,000,000 acres are now under improved varieties of rice—a definite if modest beginning. India produces the finest rices in the world of high dietetic value, which are produced, harvested, and milled under natural conditions and need neither artificial kiln-drying nor super-polishing with talc (or with castor-oil) to improve their appearance. Some fifty crops are being thoroughly studied, and improvements are realized each year.

If the triumphs of agricultural botany are the most striking, work of great importance has been carried out in agricultural chemistry, agricultural engineering, entomology, mycology, and bacteriology. Not all of the results have been utilized in field practice, for much fundamental knowledge had first to be accumulated. The standard of agriculture is rising; artificial fertilizers are now sold by the ton where previously they were sold in pounds, and, what is equally important, they are being stocked and sold by the village shopkeeper.

Since the Indian cultivator is dependent on bullocks as draught animals, and as the milk supply is of primary importance to a vegetarian population, cattle improvement is a vital problem. Livestock work, for various reasons, has lagged behind crop improvement, but a definite step forward has been taken during the last ten years. Many Indian breeds possess real merit, and considerable progress has been made in the building up of pedigree herds. The dairying problem is also being tackled, and provision made both for experimental work and for the training of students. Research work on the many special problems of animal nutrition has been begun, and is already yielding fruitful results. In the prevention and control of animal diseases more has been done—thanks to the work of the Muktesar Veterinary Research Institute and of the provincial veterinary departments. Though much remains to be done, we can now envisage the control of the more serious epidemic diseases, while the gradual expansion of the system of veterinary dispensaries brings skilled assistance within the reach of the village cattle owner.

The Indian agricultural departments owe their inception largely to Lord Curzon's foresight and energy. India now possesses a chain of central and provincial research stations, of experimental farms and of



Gathering the crop in a Darjeeling tea garden.

agricultural colleges which have proved their value. Western agricultural practice cannot be transported bodily to the East, and exact experiment must always precede propaganda. But the most characteristic feature of the work of the agricultural departments has been a frank recognition of the cultivators' limitations, and of the fact that if scientific knowledge is to be translated into agricultural practice every link in the chain must be well forged. The organization for agricultural improvement which begins at the research station does not end at the experimental or demonstration farm, but is carried down to many thousands of village demonstration plots. Moreover, the Agricultural Department must often act as seedsman, implement dealer, agricultural engineer and manure-seller, for the means of adopting improvements must be brought to the village until non-official organizations can be built up. A most encouraging fact is the willingness of the present Legislative Councils to vote enhanced funds for the agricultural departments, and especially for bringing improvements home to the cultivator. Steady and even rapid developments, limited only by financial considerations, are taking place in several provinces. The creation of the Imperial Council of Agricultural Research, with funds of its own for the promotion of research and the dissemination of information, should secure that continuity and steady development which are so essential. The governing body of the Council being composed of Provincial Ministers for Agriculture, representatives of the Central Legislature and of the commercial community, close touch with the Provincial Departments of Agriculture and with agricultural realities is assured; the presence on the Advisory Board of representatives of all Agricultural and Veterinary Departments, of the universities, and of independent research institutes and associations should assure a wide and practical outlook.



CHAPTER II

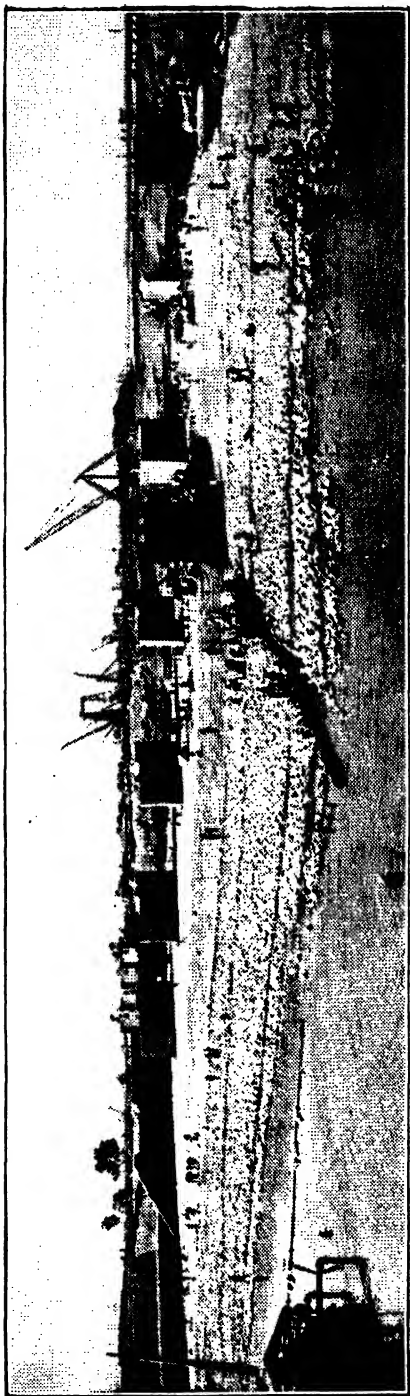
STATE IRRIGATION WORKS

*By D. G. HARRIS, C.I.E., M.I.E. (Ind.), Consulting Engineer
to the Government of India*

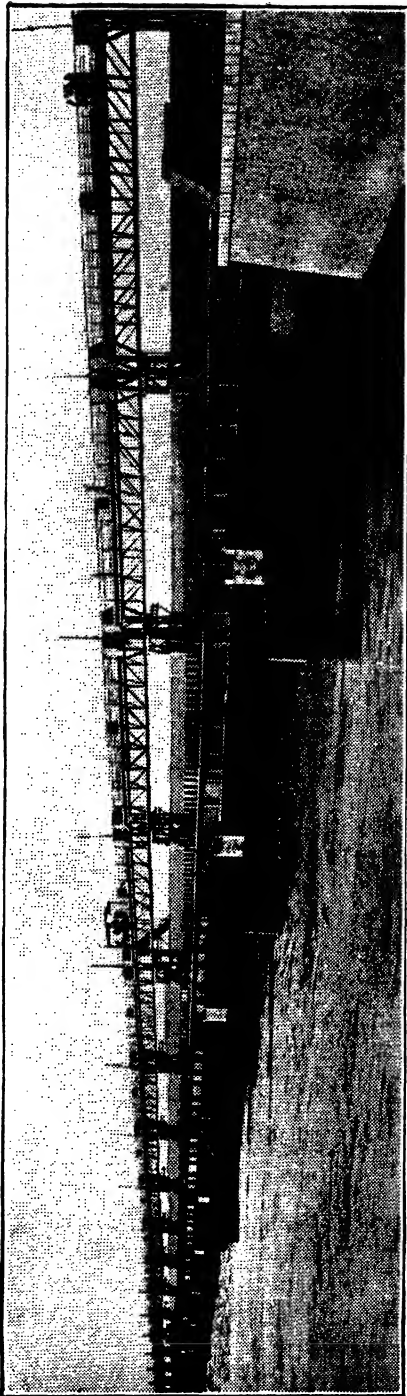
Although agriculture forms the principal occupation of the great majority of the inhabitants of India it is, over most of the Peninsula, carried on in the face of serious climatic difficulties. Not only is the rainfall unevenly distributed throughout the year, the bulk of it falling during three or four months, but it varies greatly from one year to another. At many stations annual rainfalls of only half the average are not uncommon, while at some less than a quarter of the normal amount has been recorded. There is a huge area throughout which, if reliance had to be placed upon rainfall alone, the spectre of famine and drought would be ever present, this area including practically the whole of the Punjab, the North-West Frontier Province, the United Provinces, Sind, a large portion of Bihar, most of Madras and Bombay, part of the Central Provinces, and a small tract in Burma.

From very early times, therefore, efforts have been made to supplement the rainfall by means of artificial irrigation. Wells have been in use for the purpose since time immemorial, and in many parts of India there are small canals of considerable antiquity designed to convey water from neighbouring rivers or reservoirs to the fields. But it is only during the last century that the subject has been approached on scientific lines and that the great State irrigation systems, which rank to-day among the largest engineering works in the world, have come into existence.

These systems may be divided into two main classes—those provided with artificial storage in the shape of reservoirs, and those dependent throughout the year on the natural discharge of the rivers from which they have their origin. Works of the latter class are found mainly in Northern India, where the rivers, being snow-fed, carry a perennial supply of water. Throughout most of the remainder of the Peninsula,



The Lloyd Barrage at Sukkur in process of construction.



The Sutlej Valley Weir.

where no such natural storage is available as the snowfields and glaciers of the Himalayas afford, artificial storage has to be provided; reservoirs are constructed by damming the river valleys, the monsoon rainfall thus entrapped being conserved for use throughout the dry months of the year.

In the case of the perennial systems the water in the parent river is held up by means of a weir or barrage constructed across it and is diverted into one or more main canals, which convey it to the area to be irrigated, through which it is distributed by a network of smaller channels. To quote a single example of such a system, the Ganges system in the United Provinces, which draws its supply from two weirs on the Ganges, comprises over 7,500 miles of channel; the upper canal is 200ft. wide at its head, and 11ft. deep, and 2,500,000 acres are irrigated annually by it. There are systems of equal magnitude in the Punjab, and even these great works will be eclipsed when certain of the major projects now under construction come into operation. The Sukkur Barrage project in Sind and the Sutlej Valley project in the Punjab will each, on completion, irrigate more than 5,000,000 acres.

It was not until the seventies of last century that the first large masonry dam was built in India, but since that time dam construction has proceeded apace; most of the possible perennial schemes have either already been constructed or are now under construction, and it is on the development of storage that the future of State irrigation in India must mainly depend. The two latest dams to come into operation are those in the Bombay Presidency at Bhandarara and Bhatgarh, which feed the Pravara and Nira Canals respectively; the former is 270ft., the latter 180ft. high. A further dam of the first magnitude is now under construction on the Cauvery; it will be 200ft. high and will store 90,000,000,000 cubic feet of water to augment the precarious supply of the canals in the Cauvery delta and to allow of their extension. Of schemes in contemplation, that for the Bhakra dam in the Punjab is the most important. If constructed, the dam will be 500ft. high, by far the highest yet built.

Apart from the direct benefit which irrigation confers upon the cultivator of settled lands, it has value in many other directions. In the Punjab millions of acres which, owing to the scanty rainfall, were previously uninhabitable have, as a result of the construction of canals, been colonized and are now among the richest areas in India, thus adding greatly to the food supplies of the country and also affording an outlet for the surplus population of congested districts. The canals in

the North-West Frontier Province have further shown that irrigation is a potent factor in securing the peace of the border, and that, if only effective means of irrigation can be provided, the restless people of the frontier are quite prepared to settle down to peaceful agricultural pursuits. Unfortunately the scope for such canals is limited, but an extensive survey is now in progress in the hope of discovering further sources of supply.

At present some 28,000,000 acres are irrigated annually by State irrigation works, a figure which will be increased to about 40,000,000 acres when the works now under construction are completed and certain further schemes which are likely to be taken in hand in the near future are built. Taken as a whole, irrigation is offered on extremely easy terms, and the water rates represent only a very small proportion of the extra profit which the cultivator secures owing to the water he receives.

Irrigation works are, of course, expensive. Not only must weirs or dams be constructed and the canals and their subsidiary channels excavated, but in many cases it is necessary to carry the channels across the drainage of the country, entailing large river crossings in the shape of aqueducts or siphons. Yet the irrigation works of India are, in general, remunerative, although many of them have been and are still built with little or no eye to a direct financial return, being constructed primarily with a view to the prevention of famine. Up to the end of the financial year 1927-28, the capital outlay on State irrigation works amounted to about £87,000,000, on which a net return of $6\frac{1}{2}$ per cent. was realized. It is estimated that the value of the crops which received irrigation from State works in that year was about £100,000,000.



CHAPTER III

FORESTS AND TIMBERS

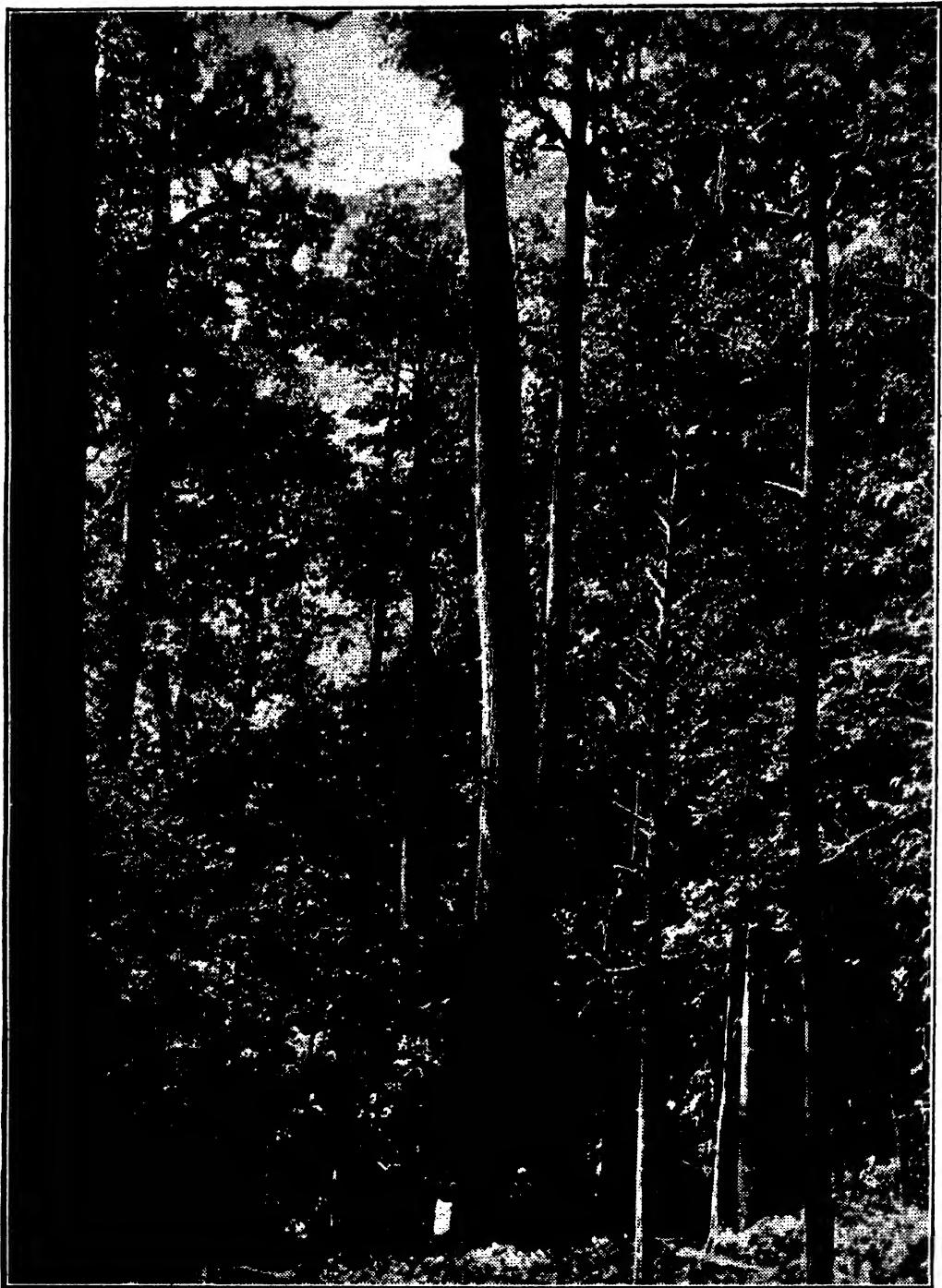
By H. STAINTON-TIREMAN

The great variety of temperature and humidity found in India has given rise to a wide range of forest types, from the conifers of the Himalayas to the teak of Burma and South India and the dense evergreen forest of the regions of excessive rainfall. The forest flora is immensely rich; the number of tree species alone is upwards of 2,500.

To India belongs the distinction of being the first part of the Empire to recognize the value of its forests and to take steps to protect them. The Indian Forest Act was passed in 1865, and a Forest Department was created about the same time. An immense amount of work has since been accomplished in giving the forests a legal status, in framing working plans for their systematic management, in creating plantations, and in building and road-making, and the forests now constitute an asset of great and increasing value. The State forests cover an area of some 250,000 square miles, more than double that of the British Isles, and in 1926-27 they yielded a net revenue of close upon two millions sterling.

In the early years of its existence the Forest Department was too busy to pay much attention to forest research, and it was not until 1906 that a Forest Research Institute was constituted at Dehra Dun. From small beginnings this has now grown to be one of the best equipped and possibly the largest of its kind in the world. It conducts research into the problems connected with the formation and improvement of forests and the utilization of timber and other forest products. The training of the superior and upper subordinate staffs is also carried out at Dehra in conjunction with the institute.

Until recently the extraction of timber has been limited to comparatively few species. Natural seasoning is for climatic reasons out of the question, and although much has been done to improve communications and methods of logging, the forests are usually situated in the



An evergreen forest in Southern India.

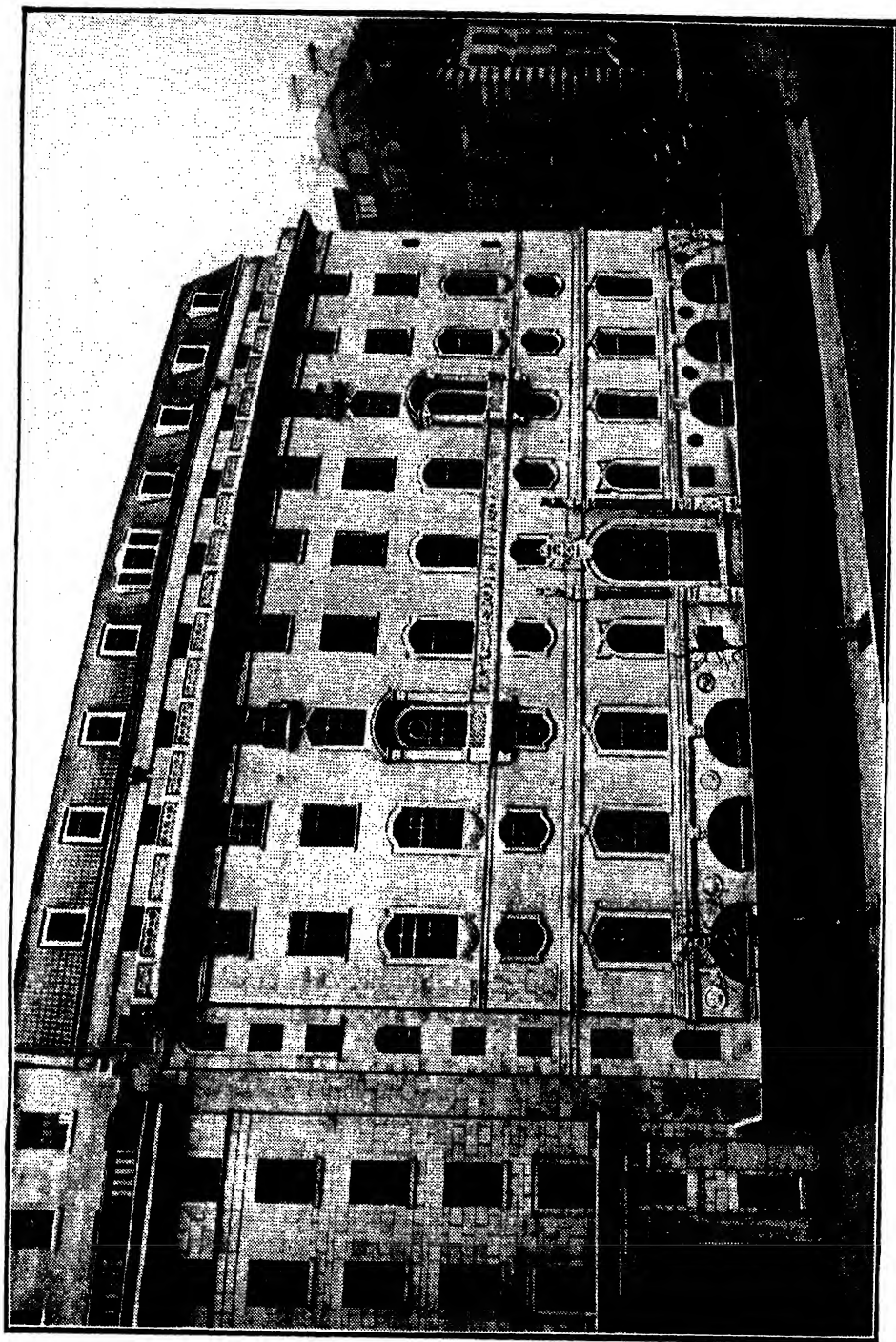
more inaccessible parts of the country, and the cost of extraction is high. It has thus been impossible to market at a profit any but the most valuable and durable timbers. The consequent waste is enormous, and is roughly estimated at over 3,000,000 tons per annum.

With a view to utilizing some of this surplus production the Madras Forest Department some few years ago embarked on a scheme of installing American logging machinery in conjunction with saw mills and seasoning kilns erected in the vicinity of the forests, with a view to speeding up extraction and to converting and artificially seasoning the timber before insects and fungi have time to attack it. The results have been encouraging, and timbers previously considered scarcely fit for firewood now find a ready market.

The best-known Indian timbers are sandalwood, noted for its oil, probably the most valuable forest product in the world; teak, sal and deodar, used for constructional purposes and railway sleepers; ebony and rosewood, used for decorative work; and toon, pyinkado and padauk, the last named being confined to Burma and the Andamans.

Next to timber the most important forest product is the bamboo, which is put to a variety of uses. An instance of the valuable work carried out at Dehra Dun is the recent discovery, after years of patient investigation, that bamboo yields a pulp equal, if not superior, to wood pulp, and costing less to produce. Supplies of the raw material are almost illimitable, and there is every prospect of the early establishment of a new and thriving industry.

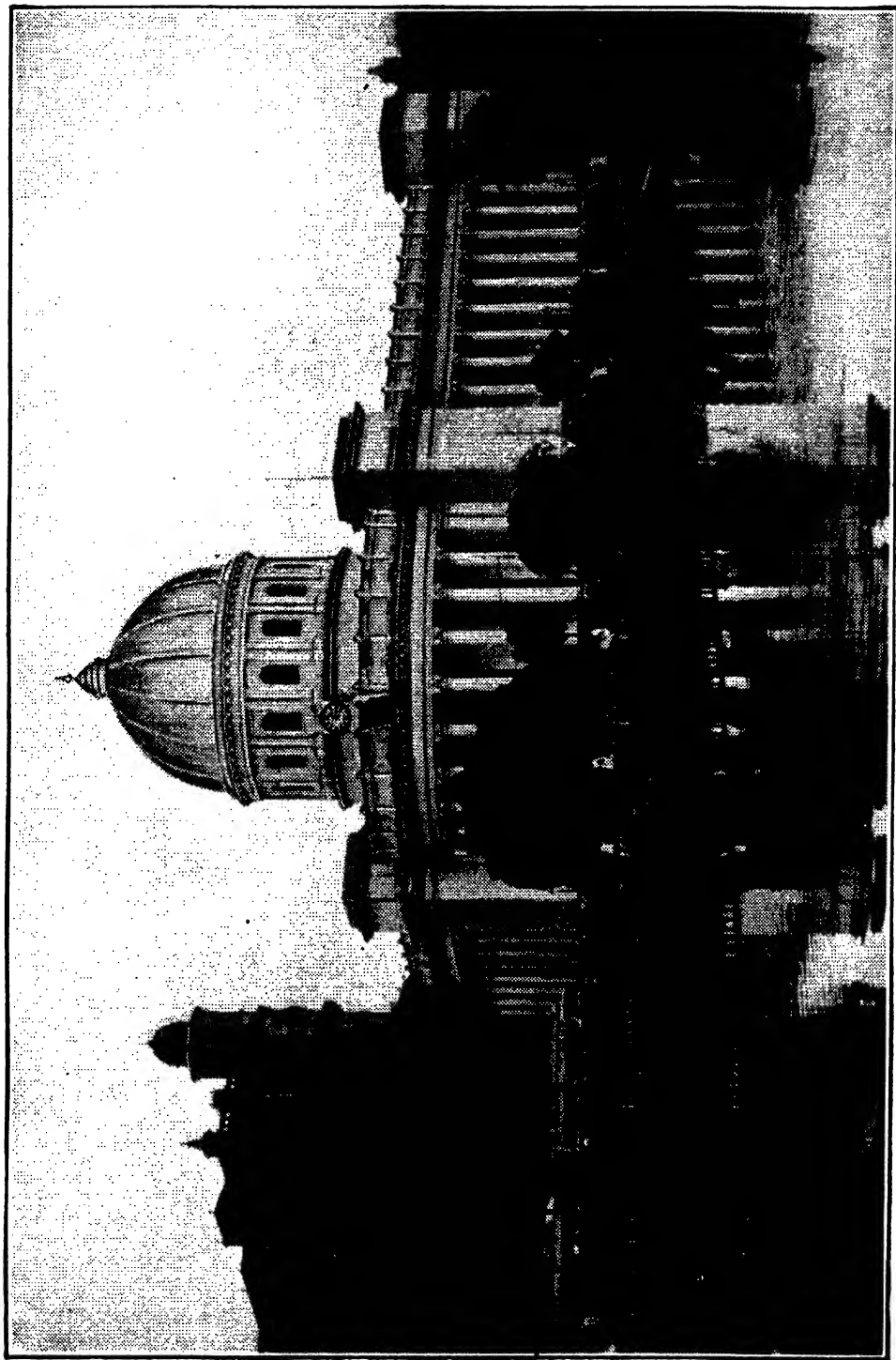
The Great Wembley Exhibition and the Empire Timber Exhibition of 1920 drew considerable attention to the beauty of certain Indian timbers previously little known even in India, with the result that the value of imports into this country of Indian timber other than teak, which during the seven years ended 1919 had averaged some £16,000, rose during the seven years ended 1926 to an average of £97,000. The timbers referred to are Indian laurel, rosewood, padauk, koko, pyinma, and gurjan from India and Burma, and silver-grey wood, chuglam, white mahogany, and bombwe from the Andamans. Several examples of the fine work executed in these woods are to be seen in this country. They will be utilized for the furnishing and fitting of the new India House, which will afford an opportunity for their inspection. As is shown by the figures just quoted, there is already some demand for these timbers in Great Britain, and if the existing primitive methods of extraction can be improved there is an immediate prospect of a considerable expansion in the trade.



The new India House, designed by Sir Herbert Baker, A.R.A., in Aldwych, London.

India imports every year some 40,000 tons of timber, valued at £34,000, yet with her huge untouched supplies she should be an exporting country. For this she is very favourably situated. The forests of the west coast of India and Burma are near the seaboard, and those of the Andamans are within a stone's-throw of deep water. They are considerably nearer to South Africa, Egypt, and Iraq than the sources from which these countries now import large quantities of timber. Properly converted and seasoned the Indian timbers are in no way inferior to these, and there is no intrinsic reason why India should not capture a large part of this trade at an early date. She might, too, in the more distant future, look even farther afield; should the predicted world shortage of soft woods result in raising prices, she should be in a position to compete in the markets of Europe and Australia. Trade development is normally the concern of private enterprise, but so little is known of the qualities of the timbers concerned that capital is unlikely to be attracted to exploit them until the Government, by practical example, has demonstrated the possibility of a profitable trade. This will require very considerable expenditure, and a start has already been made by the employment of specially trained forest engineers and utilization officers in India, and of a Timber Adviser to the Indian Trade Commissioner in London. The Forest Service has done its part, and by protecting from destruction and improving the forests has provided the State with a property of great potential value. In order that the best use may be made of this property it is to be hoped that those who control the finances of the Central and Provincial Governments in India will take the long view and develop to their fullest extent the recently organized utilization agencies, looking not to an immediate profit, but to the immense possibilities of the future.





The General Post Office at Calcutta.

CHAPTER IV

THE POST AND TELEGRAPH SERVICES

By SIR GEOFFREY CLARKE, C.S.I.

Previous to 1913 there were two departments in India dealing the one with postal work and the other with telegraphs and telephones. In that year the departments were amalgamated and placed under one Director-General.

The British do not appear to have formed any established system of communication when they began to extend their possessions in India, and in the middle of the eighteenth century it was a matter of no small difficulty to send a letter more than 100 miles. The most important step in connexion with the Post Office was taken in 1854, when postage stamps were introduced. In that year cheap rates, irrespective of distance, were fixed for the whole country, and a single Director-General was appointed to control the service. The problem which India had to face in the development of its postal system has been greatly complicated by the diversity of races, the large number of scripts in which the various languages are written, the illiteracy of the vast majority of the people, and the difficulty of communications. Despite these obstacles the development in the last fifty years has been extraordinary.

The number of articles passing through the post has increased from under 200,000,000 in 1880 to about 1,400,000,000 in 1928, notwithstanding a large increase in the postage rates in 1922. On April 1, 1928, there were 21,608 post offices and a staff of 108,700 persons. During the past few years special attention has been paid to the extension of rural post offices, and 748 of these were opened in 1927-28. These offices do not pay their way, but they serve to develop postal communications and to keep the village people in touch with the rest of the world. The real pioneer of the Post Office in India is the village postman, who has regular beats, taking sometimes a week to go round. He delivers and collects correspondence, pays and books money orders, and clears the village letter boxes. He is, in fact, a travelling post office

and a most important link in communications. The efficiency of the postal service in India is one of the outstanding features of the British administration. The postal buildings in the large cities compare favourably with any in the world. There is a highly organized railway mail service, and motor transport for mails is steadily increasing, but owing to the nature of the country there still remain many places which can only be served by foot runners, and in 1928 there were over 90,000 miles of runners' lines in which 15,000 men were employed carrying mails.

The Money Order system was taken over by the Post Office from the Government Treasury in 1880, and from that year to 1928 the number of money orders issued annually has increased from 1,500,000 to 38,500,000, and the value from 46,000,000 to 920,000,000 rupees. As an index to the general prosperity of the country the Post Office Savings Bank returns are significant. In the year 1883, just after the Post Office took over the administration from the Government Savings Bank, there were 4,238 banks with 39,121 accounts and a deposit of about 3,000,000 rupees. On April 1, 1928, there were 12,326 banks with over 2,500,000 accounts and a deposit of nearly 268,000,000 rupees. It certainly does not seem as if the present generation in India had any distrust of the stability of the Government.

The Cash on Delivery system is largely used in India, where it meets a real demand owing to the paucity of shopping centres. The Post Office has also a very successful insurance fund; it pays pensions, collects salt revenue, and sells quinine. It is, indeed, more intimately connected with the life of the people than any other organization in the country, and the character of its administration under British rule may be judged by the absolute confidence placed in it by all classes of the community.

The first telegraph line in India was opened between Calcutta and Diamond Harbour in 1851, and Lord Dalhousie was so impressed by its success that he persuaded the Court of Directors to sanction the construction of lines between all the large towns. This decision had an importance little dreamed of at the time and was probably the saving of India at the outbreak of the Mutiny.

The telegraph service was at first confined to departmental telegraph offices, but in 1883 lines were extended to rural areas, through the agency of the Post Office, and there are at present nearly 10,000 telegraph offices open for paid traffic. To link up these offices there are 99,978 miles of line and about 452,000 miles of wire. The total number

of paid telegrams has increased from 13,000,000 to nearly 20,000,000 in the last ten years, which shows how very quickly the telegraph habit has grown. The great difficulty to be faced in India is the maintenance of the long overhead wires. They are subject to perpetual disturbance. In forest tracts they are liable to be broken by falling trees, and in low-lying country to be submerged during the rainy season. Low insulation is a common trouble, and this is often due to spiders' webs, salt deposit on the wires, electric storms, and other unavoidable causes. It is only by a system of constant patrol that the lines are kept in working order, yet so efficient is the maintenance that high-speed working is possible upon all the large circuits, and, except between Rangoon and Madras, it has not been found advisable to resort to radio telegraphy for any of the internal communications. With the above exception, commercial radio telegraphy in India is almost entirely confined to ships' messages. For foreign traffic, however, the beam stations established near Kirkee and Dhond have proved a great success. They were opened in July, 1928, and accepted messages at three-quarters of the cable rate, thereby reaping a rich harvest. Now that the cable and wireless systems are amalgamated it is to be hoped that rates by either route will be equalized at the lower figure.

India has often been blamed for the inadequacy of her telephone services. The systems in Calcutta, Bombay, Madras, Rangoon, and Karachi are in the hands of private companies, while the telephones in the rest of British India, including the trunk lines, are managed by the Government. In this vast area (excluding the licensed areas) there are only 280 exchanges with a total of about 18,000 connexions; while the telephone revenue is about 3,500,000 rupees against an expenditure of nearly 5,000,000. The slowness of telephone development is partly due to the apathy of the people, partly to the rigid methods of charging, and partly to the difficulty of getting capital for purposes of extension. There has been a sad lack of progress, and, to quote one example, the two most important cities of Calcutta and Bombay, within 1,200 miles of each other, still remain unconnected by a direct telephone. There does certainly seem to be urgent need for a more advanced telephone policy.

On the whole the Posts and Telegraphs of India is a service of which the country may be proud, and one of the reasons for its success is the fact that the Government has never regarded the department as a source of revenue, but has been satisfied in keeping rates so adjusted as to cover expenses with a working margin.



Types of Indian Police.

CHAPTER V

THE INDIAN POLICE SYSTEM

The present organization of the Indian Police is the result of a number of experiments on the part of the British rulers of India and of more or less painful experiences. When the East India Company became responsible for the civil government of extensive divisions of India they inherited the police problem of their Mohamedan predecessors, which was a more or less military problem concerned almost entirely with the protection of wayfarers and the safety of wealthy citizens against the depredations of organized bands of looters—the dreaded dacoits. Investigation of crime, when it was undertaken, was a rough-and-ready affair, confined largely to the ingenious physical and psychological devices of the type immortalized in some of the Arabian Nights stories.

As their earliest police problem was exactly the same as that of their predecessors it is not surprising that the East India Company simply retained the traditional Moghul police system, with its Faujdars and Kotwals, in big cities and the more important tracts, and its reliance on the services of the bigger landowners and their retainers elsewhere. Circumstances, however, quickly forced the Company to improve the organization and quality of their police agents, and as early as the last quarter of the eighteenth century Warren Hastings was busily engaged on this task in Bengal. He introduced British supervision over police work and started the first regular civil police in India. His work was copied in the two other Presidencies, and between his time and the middle of the next century various improvements in detail were made. The system failed in the end, partly because it was devised to cope only with the comparatively simple circumstances of an India without communications or sophisticated crime, and partly because its arrangements for superior control were inadequate. It was left to Sir Charles Napier, the conqueror of Sind, to point the way to the present organi-

zation. Conditions on the Sind border called for a well-organized, well-armed, and well-disciplined and trained police force, and so Sir Charles formed his Sind police on the model of the Irish Constabulary. One of the key-points of his scheme was a sufficient number of British officers. The example and success of the Sind police was one of the causes of the famous Indian Police Commission of 1860, which resulted in the present constabulary police system.

In place of the old district collections of Dogberries, supplemented for striking purposes by battalions of military police or other half-civil, half-military forces, was substituted a regular constabulary organized on a provincial basis, with its own British officers who were whole-time police officers responsible for the recruitment, training, discipline, interior economy, and technical police work of their men. Inside the province the unit of administration is the district, and inside the district the working unit is the police station. There are about 200 districts in British India, and it will be realized, therefore, that a district is a somewhat extensive unit. Approximately 3,000 square miles may be taken as the size of a representative district, and about 200 square miles as the size of a police station jurisdiction. A rural police station is, as a rule, staffed by a station house officer, usually of the rank of sub-inspector, a head constable (sergeant) clerk, a head constable investigating officer, and a dozen or more constables, who serve warrants, escort prisoners, and make themselves generally useful.

At the head of the provincial police force is an Inspector-General, who deals direct with the Provincial Government, and is the last court of appeal in the matter of internal discipline and organization. Under him are a number of Deputy Inspectors-General, each charged with the supervision of the police work of a number of districts. But, of course, it is on the district Superintendent of Police and his subordinates that the work of the investigation and detection of crime falls, and the success of the police administration depends on their quality. It is difficult to say what lies outside the scope of their operations. Naturally, they register all cases of crime which occur in the district and investigate all but the most petty of these. The battery of registers kept up in a police station in India is an impressive sight. These registers refer to vital statistics, general conditions—economic and social as well as criminal—of the villages, incidents of flood, fire, and all the other drawbacks to human life in a part of the world where nature is not so well bridled as she is in the West. Few, indeed, are the operations of the Government which can be carried on without some

ADMINISTRATIVE SERVICES

assistance from or reference to that humble Atlas, the Station House Officer.

The typical work of the Indian Police is still provided by house-breaking, gang robberies, highway robberies, murders, and such like primitive crimes, and in addition they have to perform various quasi-military duties like escorting treasure, guarding certain buildings, and so on. But sophisticated crime is on the increase. The Indian note forger and coin counterfeiter has few equals anywhere in the world, while fraudulent company and bank promotions, conspiracies of various sorts, and revolutionary and other crimes provide plenty of work for the capable and well-organized Criminal Intelligence Departments which every province now maintains. Many Indians possess high qualities as detectives, and the work of these special departments need not fear comparison with that of similar institutions elsewhere. It must never be forgotten that the Finger Print System originated in India, and, perhaps, is still practised there with the greatest degree of skill.



An Idol Worshipper.

CHAPTER VI

THE INDIAN MEDICAL SERVICE

By **LIEUT.-COL. D. G. CRAWFORD**

When the East India Company opened their first factory, at Surat, in 1613, one of the officers on the factory staff was a "chirurgion," and with his appointment the I.M.S. started, one strong. As new factories, each requiring a surgeon, were opened the number rose. But it was not until the English settlements began to raise troops, partly for defence against Indian Powers, partly to carry on war against the French in Southern India, that any great increase took place in the number of medical officers.

Up to the middle of the eighteenth century these surgeons were individuals engaged for service each at his station. On October 20, 1763, the Bengal Council combined their medical officers into a graded service, with fixed rules for promotion. These orders provided for Bengal a strength of forty—four head surgeons, eight surgeons, and twenty-eight surgeons mates. Madras and Bombay followed suit, Madras with the same strength, Bombay with somewhat fewer.

The demand for medical officers for the Maisur and Maratha wars involved rapid increase in numbers. A list of the Bengal service in 1774 shows sixty-nine names, one of 1783 includes 140. In 1796 the number required for Bengal was given as 142—ninety-six military and forty-six civil. A Madras list of 1767 shows twenty-eight; a General Order of 1784 gives the required strength as 48; the Madras Army list of 1793 shows 101. In 1786 the Court sanctioned 234 surgeons for the three Presidency Armies, exclusive of civil surgeons. None of these lists provided any reserve for leave.

Between 1800 and 1850 further increases were required by the many wars—Maratha, Burma, Afghanistan, China, Punjab, and the successive annexation of new provinces, Burma, Punjab, Central Provinces, and Oudh. A Bengal General Order of May 6, 1824, shows 630 medical officers in the three Presidencies. The Army list of January, 1861,

includes 819, the highest strength attained before the Great War. In January, 1913, there were 770. During the War retired officers were recalled, and many temporary officers, chiefly Indians, were appointed. In January, 1919, the numbers reached 1,638, including 590 regular, 835 temporary, and forty-six retired officers. In January, 1929, there were 745, including 129 temporary officers.

During the eighteenth century about four out of every five died in India; nowadays the mortality is about one in five. In 1788 the Governor-General conferred commissions on medical officers who had previously served on warrants. In 1796 leave with pay and pension was granted to all services. In 1835 the Medical Colleges of Calcutta and Madras were founded, and medical education in India began. The Medical College of Bombay was established ten years later. In 1855 competition for admission to the I.M.S. was introduced.

The Mutiny cost the lives of forty-two officers of the I.M.S. Four were killed in action, twenty-four were killed by mutineers, and fourteen died of hardship and disease. After the Mutiny recruitment ceased for four years, abolition of the service and amalgamation with the Army Medical Department being contemplated, but in the end little change took place.

In 1896 the three medical "Establishments" of Bengal, Madras, and Bombay were abolished, and all admissions were made to one list for general service. Shortly before the War the regimental medical system was abolished in India, as it had been in the British Army forty years earlier, and the station hospital system was introduced. The change, though in some respects regrettable, was necessary to efficiency. Competitive examination for admission ceased with the War. Since 1915 all admissions have been by nomination; for the present the proportion nominated has been fixed at two-thirds Europeans to one-third Indians.

Medicine, surgery, sanitation, medical education, science, have always formed part of the regular duties of the I.M.S. But, from the first, members of the service have from time to time performed services altogether outside professional routine. Such services have sometimes been of the highest importance. Two early surgeons gained lasting fame for themselves by earning for their employers, the Company, the favour of Indian rulers by their professional skill. Early in 1645 Gabriel Boughton accompanied a mission from Surat to the Court of Shah Jahan, and was afterwards in the service of the Emperor's second son, Shah Shuja, Viceroy of Bengal, from whom he obtained a grant allowing him, and through him the Company, to import goods into

Bengal duty free. He died between 1650 and 1653. Seventy years later William Hamilton, as surgeon, accompanied Surman's Embassy to the Court of the Emperor Farakh Siyar, which reached Delhi on July 7, 1715. He was called in to treat the Emperor for a malady which had delayed his marriage, and did so with success. His surgical skill brought Surman's mission into favour at Court and greatly contributed to its successful result. Hamilton died on September 4, 1717, soon after his return to Calcutta.

Many later, though less important, instances might be quoted. In administration, at the capture of Calcutta in 1756, after Drake, the Governor, had fled to the ships—an episode surely unparalleled in English history—Holwell, a surgeon, took command of the garrison. After arranging the surrender he was one of the prisoners, and one of the few survivors of the Black Hole. Later he became, for a short time, Governor of Bengal. Sir John McNeill became Minister Plenipotentiary in Persia, and later was deputed as Special Commissioner to the Crimea. In philology the names of Leyden, H. H. Wilson, and Sprenger are pre-eminent. In economic science, Sir William Brooke-O'Shaughnessy introduced the telegraph into India; Hugh Cleghorn and Alexander Gibson had a large share in the foundation of the Forest Department. Many members of the service have been eminent in science. In botany, Roxburgh, Wallich, Griffith, Thomson, Royle, King, Prain; in geology, Falconer, McClelland, and H. J. Carter; in zoology, Jerdon, Day, and Alcock; in scientific research, Vandyke Carter and D. D. Cunningham; and, above all, two of the passing generation, both still living, Sir Ronald Ross and Sir Leonard Rogers. It is unlikely that the I.M.S. will ever again furnish the Foreign Office with an Ambassador or an Indian province with a Governor. But the path of scientific research remains open.



PART V

THE PEOPLES OF INDIA

CHAPTER I

HINDUISM AND ISLAM

By the late SIR VALENTINE CHIROL

As in Europe during the Dark Ages, religion is still the dominant factor in the life of the peoples of India, and for the overwhelming majority of her vast population religion spells either Hinduism or Islam. Out of a total of 320,000,000 over 200,000,000 count as Hindus and 70,000,000 as Mohamedans.

Hinduism grew up on Indian soil and in an Indian environment out of the fusion, almost before the dawn of history, of Aryan tribes descending from the North with the primitive races already settled in the great sub-continent. The Brahmans, who were its priests and law-givers and statesmen, built up a religious and social system peculiar to India, and, indeed, unique in the world's history. Its exuberant polytheism and its subtle philosophies are as elastic as the institution of caste, which governs the life of every Hindu from his cradle to his grave, and, indeed, throughout an endless chain of existences is rigid and enduring. Hinduism was supreme all over India when, in the eleventh century, Mohamedan invaders, aliens in race and creed, swept down from Central Asia, carrying the sword in one hand and the Koran in the other. From the earliest times Hindu kingdoms and dynasties had risen and striven and fallen, but the structure of Hindu society was almost incompatible with a wider sense of political unity or with the organization of national forces capable of withstanding the impact of martial races trained to war in the brotherhood of all True Believers, to whose fierce Monotheism the abomination of Hindu idolatry was in itself a sufficient challenge.

Invasion after invasion carried the sword of Islam over almost the whole of India, and in Upper India and Bengal, where the majority of Indian Mohamedans are still congregated, large numbers of Hindus adopted the creed of their new masters. But during all the centuries of Mohamedan domination Islam never prevailed over Hinduism, which

throughout that period continued to produce some of its greatest teachers and philosophers and poets, and even to consolidate and extend its caste system, of which Mohamedans themselves sometimes caught the contagion. *Purdah*, with all its detrimental effects on womanhood, was the only institution which the Hindus seem to have borrowed from their Mohamedan rulers. Only once was a deliberate attempt made to break down the barriers between the ruling and the subject races. Akbar, the greatest of the Moghul Emperors—a born sceptic, with a keen, intellectual interest in all forms of religious thought—not only employed Hindus in high offices of trust and entered into matrimonial alliances with the blue-blooded Hindus of Rajputana, but he even conceived the idea of promoting religious and social as well as political unity by founding a new religion of which he proclaimed himself the supreme head. But in spite of his immense authority and prestige the *Din-i-Ilahi*, a patchwork of conflicting creeds, had only a short and artificial life. It died with Akbar, and though his immediate successors inherited some of his tolerance, Aurangzeb swung back to the old fanaticism of Islam, and the revolt of Hindu Maharastra under Shivaji marked the beginning of the end of Mohamedan domination. With the disintegration of the Moghul Empire came the growth of British power, which was alone capable of rescuing India from anarchy.

Never, perhaps, has the profound difference between the Hindu and Mohamedan mentality been so strikingly illustrated as during the period when India was definitely passing under British rule. Once they had lost the power of the sword the Mohamedans sank into the torpor of fatalism. But their fighting races soon took readily to military service under the new British *Raj*. In those parts of India, too, where they were in a majority or in a still very influential minority, the Mohamedans continued to be employed in the local Courts and in the subordinate branches of the Administration. But to the moral and intellectual influences of Western civilization they remained for a long time entirely impervious, and when English education was introduced they rejected its benefits for more than half a century because they deemed its spirit to be incompatible with the doctrines of Islam.

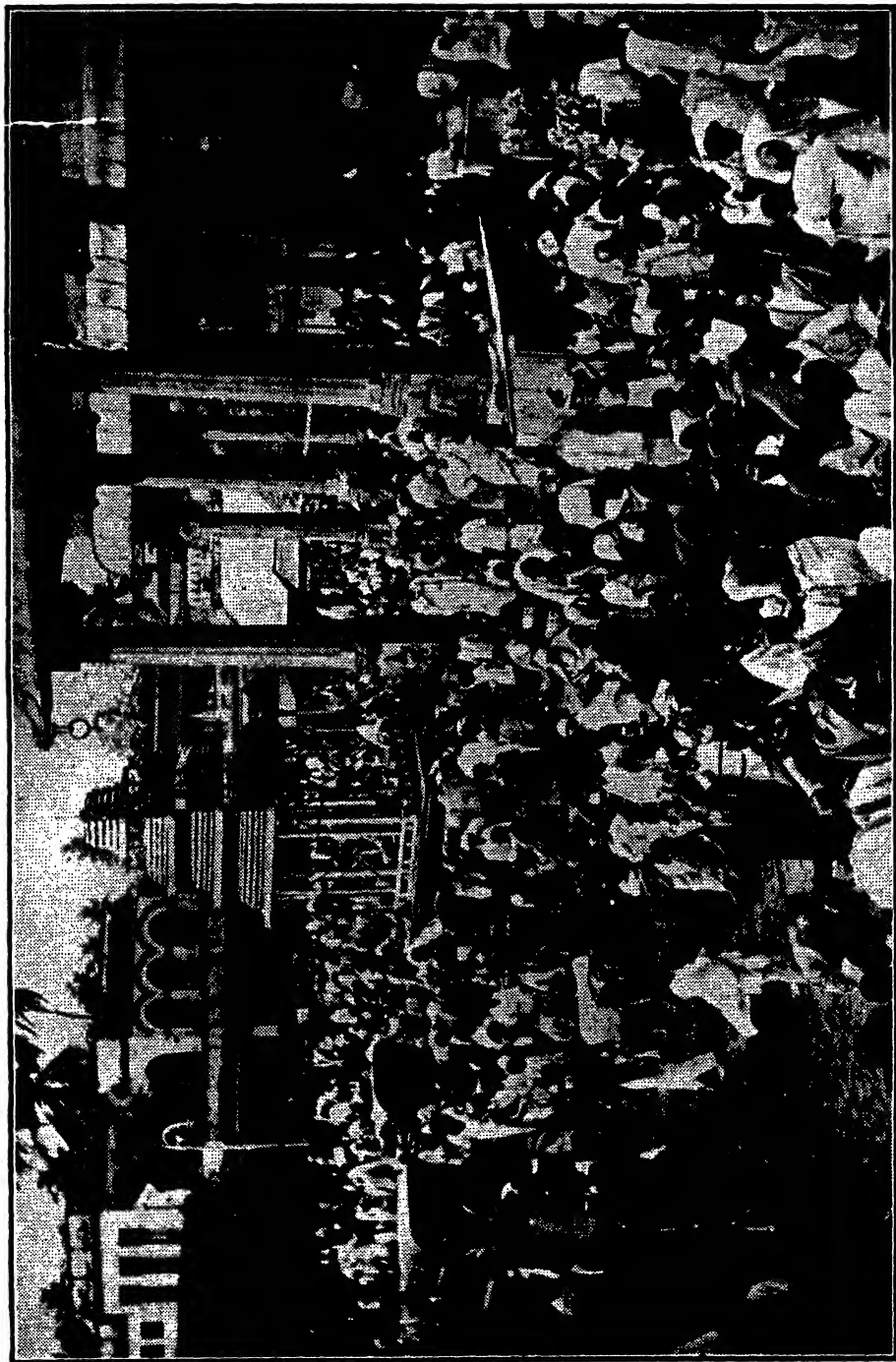
Not so the Hindus. Even before the introduction of a Western system of education some of the most thoughtful among them yielded readily to the new current, and even high-caste Brahmans took the lead in a powerful reform movement, nowhere more strikingly manifested than in the birth of the Brahmo Somaj, which professed an enlightened Theism. Other Hindus who were much slower to relax in any way

their religious orthodoxy were quick to see the material advantages to be derived from Western education and a knowledge of English. The Brahmans, who in Hindu society had secured for themselves the monopoly of learning and with it had often grown to be the power behind the Throne, realized that a knowledge of English might still secure to them a position of great influence under their new masters, who had to rely very largely on indigenous agency to help them in their enormous task of administration. Thus they frequently filled all the subordinate branches of the public services, and as, with the diffusion of Western education and the multiplication of high schools and universities on Western lines, the British rulers of India gradually enlarged the fields of public service thrown open to Indians, it was Hindus chiefly who were found able to qualify for higher appointments.

Similarly, when Western education engendered among Indians new conceptions of political rights and national unity, borrowed from increasing contact with English literature and English history, it was the Hindus almost exclusively who initiated an Indian Nationalist movement which found its first organized expression in the Indian National Congress of 1884, mainly composed at first of Indians who gratefully realized the benefits India had derived from British rule, but demanded a larger share than had been hitherto accorded to them in the government and administration of their country.

The Mohamedans stood for a long time aloof from this movement. There were, indeed, few who had the intellectual and educational qualifications to take part in it. Not until 1875 had any influential Mohamedan come forward to warn his co-religionists that without Western education they would be left hopelessly behind. It was in that year that Sir Syed Ahmed Khan founded an Anglo-Mohamedan college at Alighur, in which he sought to reconcile Islamic orthodoxy with the British ideals of modern education. But, conscious of the deplorable backwardness of his community, he urged them to rely solely on the British sense of justice to protect their interests, and to have nothing to do with any political agitation that must, he believed, enure to the benefit of the Hindus.

His views on the whole prevailed during his lifetime, and after his death, when the Congress movement, which was passing under the control of far more advanced leaders than its founders, had begun to agitate for radical changes in the structure of British government in India, the Mohamedans, seeing the necessity of creating a political organization of their own, founded, in 1906, the All-India Moslem



A Hindu festival in the city of Madras.

League in deliberate opposition to the Indian National Congress. It steadfastly advocated thorough loyalty to the *Raj*, and no single Mohamedan took part in the campaign of political crime and murder which marked the first widespread reaction against British rule and even against Western civilization after the partition of Bengal. Though only a small minority in comparison to the Hindus, the Mohamedans claimed, not unreasonably, that in any political changes, and especially in such as might tend to give a modern basis to the government of India, their influence, the great part they had played in the history of India, as well as the virile and warlike qualities on which they prided themselves, entitled them to special consideration, and under the Morley-Minto Reforms they were accordingly granted separate communal representation in the new legislative councils. This was a concession which, in the circumstances, even so austere a democrat as John Morley could not refuse to them, though it was obviously a departure from the fundamental principles of democracy, but it unfortunately served to widen the breach between Mohamedans and Hindus at the very moment when India was entering on a new stage of political development.

At the same time there was growing up under the influence of Western education, in which they were taking an increasing share, a new school of young Mohamedans in much closer sympathy with the advanced wing of Hindu Nationalists than with the implicit faith in the British *Raj* which Syed Ahmed had taught. Only once under British rule, during the great Mutiny of 1857, had common hatred brought Mohamedans and Hindus into active cooperation for the subversion of the *Raj*, but that had been only for a brief period and over a relatively small area; and, though the horrors of the Mutiny and the stern methods of its repression left behind it a deplorable legacy of racial bitterness, that episode had not permanently affected the old antagonism between Hindus and Mohamedans. Once again the same common hatred brought a short-lived fraternization between the two communities when Mohamedan extremists carried the bulk of their co-religionists with them in a furious agitation on behalf of the Turkish Caliphate, after the Great War, and joined hands with Gandhi in his non-cooperation campaign against British authority.

But there were never more incongruous allies than the visionary Hindu saint and prophet who set the doctrine of non-violence in the forefront of his political programme and the Catalinarian Ali brothers, who never concealed their militant faith in the sword of Islam. What

that sword still meant for them was shown in the Moplah rising of 1923, which, though at first directed against the *Raj*, speedily turned into an open war waged by the Mohamedans on their Hindu neighbours and recalled all the horrors of the first Mohamedan invasions of India. Analogous incidents on a much smaller scale rapidly sobered the Hindus, and the Caliphate agitation collapsed when the Turkish Dictator himself abolished both Sultanate and Caliphate in Turkey. After that there was little talk of fraternization.

The Government of India Act of 1919 had gone far to redeem our War pledges to India by setting her feet on the path of self-government with Dominion government as the ultimate goal of British policy. The burning question for the Mohamedan community came to be what security there would be for it in a new India in which Hindu influence was bound to predominate in virtue not only of numbers but of intellectual equipment. Communal representation and a communal share in the loaves and fishes provided by the rapid Indianization of all the public services are at present the chief bones of contention between political parties that profess to voice the interests and the rights of the vast Hindu majority and the stubborn Mohamedan minority. Politicians on both sides have met repeatedly in conference to seek the *modus vivendi*, and doubtless with the best intentions, but without any success so far. Even the labours of the Statutory Commission have only served hitherto to illustrate the profound political antagonism between Hindus and Mohamedans, the latter having displayed a general willingness to cooperate with it, while the Hindu *Swaraj* party has conducted against it a violent campaign of abuse and boycott. But graver than these political demonstrations have been the frequent exhibitions of undying hatred between the masses on either side, in the recrudescence of local riots, generally arising out of religious processions and observances—cow-killing by Mohamedans and the playing of Hindu bands in front of Mohamedan places of worship. Whether British statesmen are right or wrong in believing that the political advancement of India can best be achieved by introducing the methods and institutions of Western democracy, not the least of the difficulties and dangers with which such a policy is fraught lies in the deep gulf which has for centuries divided, and still divides, the religious and social structure of Hinduism from Islam.

CHAPTER II

THE CASTE SYSTEM

By SIR WILLIAM MARRIS, K.C.S.I., K.C.I.E.

It has been said that the ordinary stay-at-home Englishman receives information about the races of India with much the same indifference as information about the distance from the earth to the sun. The latter makes no practical difference to him; nor in the ordinary way does the former either. Only on rare occasions when he realizes that something really important is afoot does the home-staying Englishman trouble his head much about Hindus or Moslems, Sikhs or Parsis. But the composition of a people or peoples has so important an influence on their politics that it is clearly to be desired that the main facts about India's population should be before the minds of Parliament and the electorate this year.

To this day the record of history is written more clearly upon the surface of India than on that of Europe. To a great extent both regions had the same experience. Waves of humanity rolled into them from outside, and earlier inhabitants of whom little is known were swept before them from the places where life was easier into the places where life was harder, from the plains and river-basins into the forests and hills. After one wave followed another, and as a rule the last wave overswept the one before it. But whereas in Europe invaders and invaded intermarried and brought about a great intermixture of blood which eventually resulted in a common civilization stretching over a great part of the continent, something very different occurred in India.

The invaders of India were of whiter skin than the peoples whom they encountered and felt themselves to belong to a higher scale of civilization. Their religion, as we gather from the earliest surviving ritual hymns, was a worship of the powers of Nature conceived of as great gods of Air and Sun and Storm; in striking contrast with the animism of the earlier peoples, who did obeisance to trees and stones and snakes. Because the invaders were relatively few, and brought few

women with them, they necessarily took to themselves mates from the darker people. But the mating impulse was checked and regulated by pride of blood. The incomers sought to keep their own stock as pure as possible. There were developed innumerable degrees of blood mixture, but out of the strong resolve not to let all these be blended in a common half-colour, it became the rule that a member of each should associate and marry only within his own degree. Within certain degree-limits a man might mate with a lower woman, but no woman might take a lower mate. The invaders would take women from the inferior race, but would not give women to it. They behaved, in fact, much as white races have since behaved in contact with a lower civilization. Such, briefly stated, is generally believed to have been the origin of caste, that rigid demarcation of human beings into dissociated strata which characterizes the Hindu world and has the sanction of its religion.

Traditionally there were four great castes—the priests, warriors, merchants, and working men. The first three were the “twice-born” castes. They alone were admitted to the sacrifices and the reading of the holy texts. The fourth class, the Sudras, existed to serve the other three. To-day castes are to be reckoned by the hundred and identifiable minor castes by the thousand. Caste remains as strongly as ever a matter of birth. A man is born to honour as a Brahman or to dishonour as a sweeper; the worst of Brahmans cannot lose his sanctity and the noblest of sweepers cannot break his birth’s invidious bar, except by going right outside the pale of his religion.

To a great extent occupation is still determined by a man’s caste, though various causes, such as education and travel and the development of industry and the desire for Government service, have blurred the boundary lines. The connexion remains so close that some writers have been disposed to look for the origin of caste in community of occupation and to ascribe the form which it eventually took to the Brahmans’ exaltation of the priestly office, which they themselves held. This theory implies that the rules against intermarriage and the like were a purely artificial accretion invented by the Brahmans; but it seems difficult to believe that an industrial guild would, of its own free will, absolutely close the door against marriage beyond its pale; or that such guilds would readily submit to a code obviously framed in the priestly interest. It seems necessary to look for some more potently compelling force, such as is provided by the determination to resist the blending of blood.

Some of the more important communities like the Rajputs, the Mahrattas, and the Jats seem to be organized rather on tribal lines than those of caste as commonly understood. There is a communion of membership which transcends tribal divisions. It is possible that the two last-named peoples were comparatively late-comers into India who never fell completely into the caste organization.

Each caste enforces its own rules by means of committees called *panchayets*. A caste man who breaks the rules by engaging in a degrading occupation, or eating improper food, or marrying beyond the pale, is arraigned before the caste tribunal. He may get off by paying a fine or standing a dinner. But for major offences he will be outcaste, and then none of his own caste-fellows will have anything to do with him; nor can he get access to the temples, nor service from any of the other workers, the barber, the cobbler, the washerman, on whom he depends for necessary offices. To places where there is a demand for wives, girls of humble caste are sometimes brought by dishonest brokers, who dispose of them at a profit by representing them as of higher caste than they are. This practice may suggest the question why a low-caste man doomed to a degrading trade should not likewise go off to some place where he was unknown and give himself out as of a high caste. The answer is that unknown strangers are always objects of suspicion in India; and that before he was accepted he would be put through tests under which he would break down for sheer lack of knowledge of the society which he sought to enter.

There is little difficulty about the precedence of the major castes. Always the Brahman comes first, and then the modern representatives of the three "twice-born" communities. Below them there would be no general agreement as to the sequence. Some Sudras are "clean"; others, though not clean, are yet not thought of as polluted. Below these, again, are a descending series of "Untouchables." In the South, where Brahmanism is strongest, the degree of pollution with which the various kinds of pariah are invested is measured by the distance within which they may not approach a Brahman.

The depressed classes are reckoned to number from fifty to sixty millions. They used to be thought of as definitely beyond the pale of Hinduism. Their position is more ambiguous nowadays, when growing tension between Hindus and Moslems makes it important to each community to increase its numerical strength. But if the outcastes are to be reckoned as Hindus it is only just and proper that Hinduism should treat them better. Logic and expediency alike tend to reinforce



A typical crowd of Indians at a railway station.



Women of Mandu, on the Malwa Plateau.

the efforts already being made by the more generous-minded of the caste leaders to show more consideration to those beyond the pale. The movement has long figured on political programmes; it is now actually gaining strength; but it still has great difficulties to overcome in the shape of orthodox conservatism.

Every Englishman naturally dislikes the oppressive rigidity of caste, especially in relation to the pariahs, and is, perhaps, inclined to blame it for evils like infant marriage and the treatment of widows, for which it is only indirectly responsible. He sees caste, also, as a grave impediment to the growth of the sense of nationality, because of the way in which it contracts the radius of sympathy. On the other hand, caste must be held to have had good results as well as evil. Some observers think that caste has preserved Hindu society through many stormy centuries in a way which nothing else could have done. And it is certain that within the narrow range of its operation caste has the power of tightening men's sympathies and maintaining traditional morality and promoting common action. How far or fast caste is likely to decay in future it is hard to say. Reform movements in Hinduism, education, and freer travel tend slowly to erode it; and it may be that the growing desire to achieve national status will come in powerfully to reinforce these causes.

Caste, however, does not provide the only lines of division within the Hindu world. There are the reforming movements of the Brahmo Somaj and the Arya Somaj. The former, with its rejection of caste and the purdah system, has never laid hold of the masses, though it makes a certain appeal to quiet-minded people in Bengal. The Arya Somaj is much more widespread and militant. It professes to go back to the Vedas and to find in them authority for social and religious reform. It condemns idol-worship and the grosser ceremonial of Hinduism, but by condoning caste and maintaining the sanctity of the cow it compromises with popular ideas. It is strongly national and opposed to Christianity.

Sikhs, Buddhists, and Jains form communities which derive from Hinduism, though now distinct from it. The Sikhs, who number 3,250,000, began as a reforming set within Hinduism, but the Moslem rulers persecuted them relentlessly and they drew together into a separate semi-military community which for a time attained an empire. To this day the Sikhs, who are mainly found in the Punjab, insist so far on their separate entity as to demand separate representation in the Legislatures.

Buddhism, the outcome of the teaching of one of the great religious leaders of the world, is very strong in Burma, where its adherents number 11,000,000, but elsewhere in India it has been almost wholly ousted by the Brahmanic revival. The Jains, who have much in common with Buddhism but stand nearer to ordinary Hinduism, number only about 1,000,000.

Numerically stronger even than the Sikhs are the Indian Christians, who number 4,000,000. Their main strength is in the South of India, and in the main they or their ancestors were low-caste people or out-castes who welcomed the prospect of a kindlier life. The Parsis, numbering only 101,000, are an immigrant people from Persia, mainly settled in and about Bombay.

In sharp contrast to the more than 200,000,000 who are within the Hindu pale or below it, or owning affinity with it, stands the great minority community of India, the 70,000,000 people who profess Islam. Islam is a Semitic religion, brought by Semitic and Mongol invaders into India with them. Hinduism is capable of the utmost varieties; it has no code; it is aristocratic in outlook and separatist in tendency. Islam, on the other hand, is clear cut, uncompromising, democratic; the religion of a personal teacher, a book and a code. It teaches that there is one God, Who is not to be worshipped in effigy or even in symbols. It has no place for caste and regards all men of the true religion as equal.

Between faiths so fundamentally opposed there is no ground in common. To the Moslem popular Hinduism seems wicked idol-worship; and there are times when the blowing of Hindu conches within his hearing at prayer time or even in the vicinity of a mosque sounds like an insult to his Deity. To the Hindu the Moslem is at best a stranger; while at the worst he is an offender against the dearest ideas of Hinduism because he kills cows for sacrifice and for food. But poles asunder as they are in their religious ideas, Hindus and Moslems often get on quite well together, and even assist at each other's festivals. That the two communities have fallen much farther apart in feeling during the past ten years is the conclusion formed by most competent observers, and is, indeed, generally admitted by far-seeing men on either side. But the present tension is not wholly nor solely of religious origin, though religion intensifies ill-feeling produced by other causes, such as bitter memories of the past or economic struggles in the present. And probably the main cause which has hardened and exacerbated feeling recently on either side is apprehension about the political future.

THE PEOPLES OF INDIA

If the strong and indifferent outsider in the person of the British official in India who has hitherto kept the peace is not going to do so in future, or even if there is any doubt whether he is going to do so, either side feels that it must spare no effort to secure its own position in the future. The very approach towards self-government is evoking some forces which tend to retard it.

To complete the enumeration of India's peoples, mention must be made of the aboriginal and half-civilized tribes, for the most part dwelling in the hills and forests, who have hitherto been generally classed as animists, though the last Census Report discards the term as inaccurate. There are some 10,000,000 of these primitive people; and it probably is as true to say of them in 1930 as was said in 1918, that they are so ignorant and depressed as to be unfitted for absorption into any scheme of government on an electoral basis.



Pathan dancing boys, Khyber Pass.



Members of the Standing Committee of the All-India Women's Conference.

CHAPTER III

THE POSITION OF WOMEN

By CORNELIA SORABJI, B.C.L. (Oxford)

How in one phrase shall the present position of women in India be stated? It is the position of the traffic in the busy quarter of some modern city, of Trafalgar-square in London, of the Strand in Calcutta—car, drayhorse, *ticca gharri*, cycle, rickshaw, or ox-cart—even as these, women are travelling at different rates of progression.

In that fact lies for women, or for traffic, the real danger; and for women the danger is enhanced in that there is no policeman to control congestion. "Ware accidents! Equalize the pace!" cries the Watcher, "*Be quick* about it!"

It is essential to understanding that this truth about an unequalized pace should be grasped at the outset. The amazing thing, however, is not our difference of speed, but that there should be any traffic at all upon the Women's Highway. What England has taken centuries to achieve has been accomplished in India in one night, so to speak. A hundred years ago women were still in the fastness to which successive invasions had driven them. The cautious British, warned by the pandits, refused to act. "The emancipation of your women folk is not our business." Who shall judge them? "By God, I am a Rajput and a King," says one of Kipling's characters to one who dares interference; "I do not speak of the life beyond the purdah." Thus initiative was left to the Indian schoolboys who went to their English tutors with the prayer—"Make our women like your wives and mothers." This petition led to discussions in Council, and eventually to that most momentous Budget entry styled "Female Education."

The Hartog Report, issued in connexion with the Simon Commission, tells us that the figures set against the entry are not even now proportionate to the urgency of the need. But let us not forget what we owe to the schoolboys: and let us rejoice over the much that has been accomplished, "in man's despite." Schools and universities in due course came into being: and the good work, once begun, found no let

or hindrance (as in England) from Victorian or pre-Victorian traditions. For happily in this direction there were no local traditions to combat. *He* might be *she*, for all that they cared—those framers of a brand-new University Act. Equally the draftsmen of the Criminal Procedure Code let in the word “person” to cover male and female. And in the fullness of time advantage was taken of both University Act and Legal Code.

Thus it happened that in one or two instances we got ahead of England. University degrees were taken on equal terms with men in Bombay in 1884. Oxford did not grant degrees to women till 1920. In 1894 an Indian woman claiming to be a “person” defended a woman upon her trial for murder in a British Court. It was not till 1923 that women began to practise at the English Bar. Again, in the Legislative Council of Travancore, a woman was in charge of the portfolio of Public Health seven years before Miss Bondfield became a Minister in London.

The racing cars are outrunning the speed of the country of origin. Turn from the cars to the ox-carts. But it is no use prating of paradox. Is it not often from paradoxes that we get our finest total results?

In some instances advance has been contemporaneous with England. Francina Sorabji, that great missionary and pioneer of women’s education in Western India, with Pandita Ramabai, her pupil, and Ramabai Ranade were preaching the gospel of education and social emancipation in the Bombay Presidency just about the time that Girton and Newnham were being founded. Mrs. P. K. Roy, of Bengal, and her sister, Lady Bose, followed not long after with their work for towns and villages.

In literature the first woman to attract attention in the West was Toru Dutt, with her exquisite poems in French and English. She has been followed by many writers of imagination in English prose and verse, including Sarojini Naidu, famous also in another sphere, and later still by journalists and editors. In the vernacular the continuity of writers from the earliest days has hardly been broken. The most famous modern writer is the novelist, Mrs. Ghosal.

Education was the woman worker’s first love, and this profession can now boast women inspectors of schools and professors of colleges, as well as teachers. As doctors with a special gift for delicate handling in surgery, as scientists, and even as research workers, women are filling responsible positions in hospitals and laboratories all over India.

In public and political life our advance has been post-War. Women

now have the franchise in all Provinces of British India, and in some Native States.

Madras has a woman for its deputy chairman of council. Bombay and Madras have women magistrates, women municipal officers, women Justices of the Peace.

The Punjab has gone ahead in a new direction, with its inspectors of industries. Progressive women go openly to polling booths, and are acquiring a reputation as public speakers. Perhaps it should be admitted that the speedy emancipation of women owes not a little to politics and the "politically minded," as they are called. More veils are discarded in Simla and Delhi in one session than during a score of years throughout all India. The men who sit in the Legislative Assemblies are beginning to realize the part that women may play in the social organization, and are anxious that their own women should be given a chance of proving themselves.

But the individuals who have "attained" are for the most part the product of the Brahmo or Arya tradition: that is to say, of the open door, of the door breached by father or grandfather in matters first of caste and religion, and then set wide on all exits, for their women folk as for themselves. Comparatively few of the English-educated women of modern India have known even modified purdah. The ease with which they assimilate Western ideals must not be allowed to mislead as to the condition of the majority.

Yet there is no need for discouragement. Progress is progress, even when it goes *kadam kadam*—as the Indian says—pace by pace. To return to our simile for these slower movers, the door, though not open, is on the latch. Push it open and look into the women's courtyard. You will find the women a little fearful. They are learning to read and write their vernacular, or, maybe, a little English, but the duties of a household are soon theirs, and the demands of an ancient religion are onerous. Still do they steal out in the dawn hour to pour an oblation of Ganges water to the Earth-Mother before the sprig of sacred basil. But the basil is grown in a pot, not on an altar. It is to be propitiated, not worshipped. It is to be propitiated on the way to the fast-opening door, not worshipped as symbolical of the whole duty of the woman of the inside.

Forget not the fragrance of the basil
In marrying, in burying, in loving.

I have seen this pot of basil moved nearer and nearer to the exit—soon the little women get past it. *The door is on the latch.* And the women,

albeit going in and out with caution, are on the move and approaching every year nearer to emancipation.

Finally, there is the solid mass of the majority—the woman of the supposed second-century tradition. *The door is shut*, often it is locked and barred. Always are the women suspicious of change of any kind. “Let us sit in our fastnesses in the courtyards of our foremothers,” say they; “let us do nothing which they did not do.”

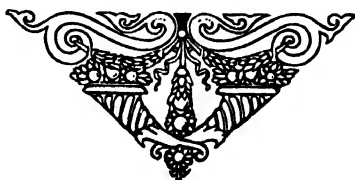
The ox-cart creaking on its wheels, a drowsy driver, drugged oxen—that is the symbol we should use to explain this block in our procession of women. Yet even here there has been a change this last decade. The drowsy driver has roused himself sufficiently to dig his toes into his oxen and twist their tails.

These women of the shut door have a charm of their own—one does not want them to lose it. Since they cannot come out to take what awaits them, cannot we carry our gifts within? is what we say. And this is what is being done. Take Bengal as an illustration. Here three purdahnashins, studying in purdah, have lately taken Arts Degrees, and together with others of varying ability, led by a Moslem Begum, they have formed themselves into a group of social service workers to help illiterate purdahnashins in towns and villages. The value of this work cannot be put too high. It is literally reform from within—the best end from which to equalize the pace.

Watcher, what of the night?

It is passing, says the Watcher. My hope is in the ox-carts.

All which things are a parable.



CHAPTER IV

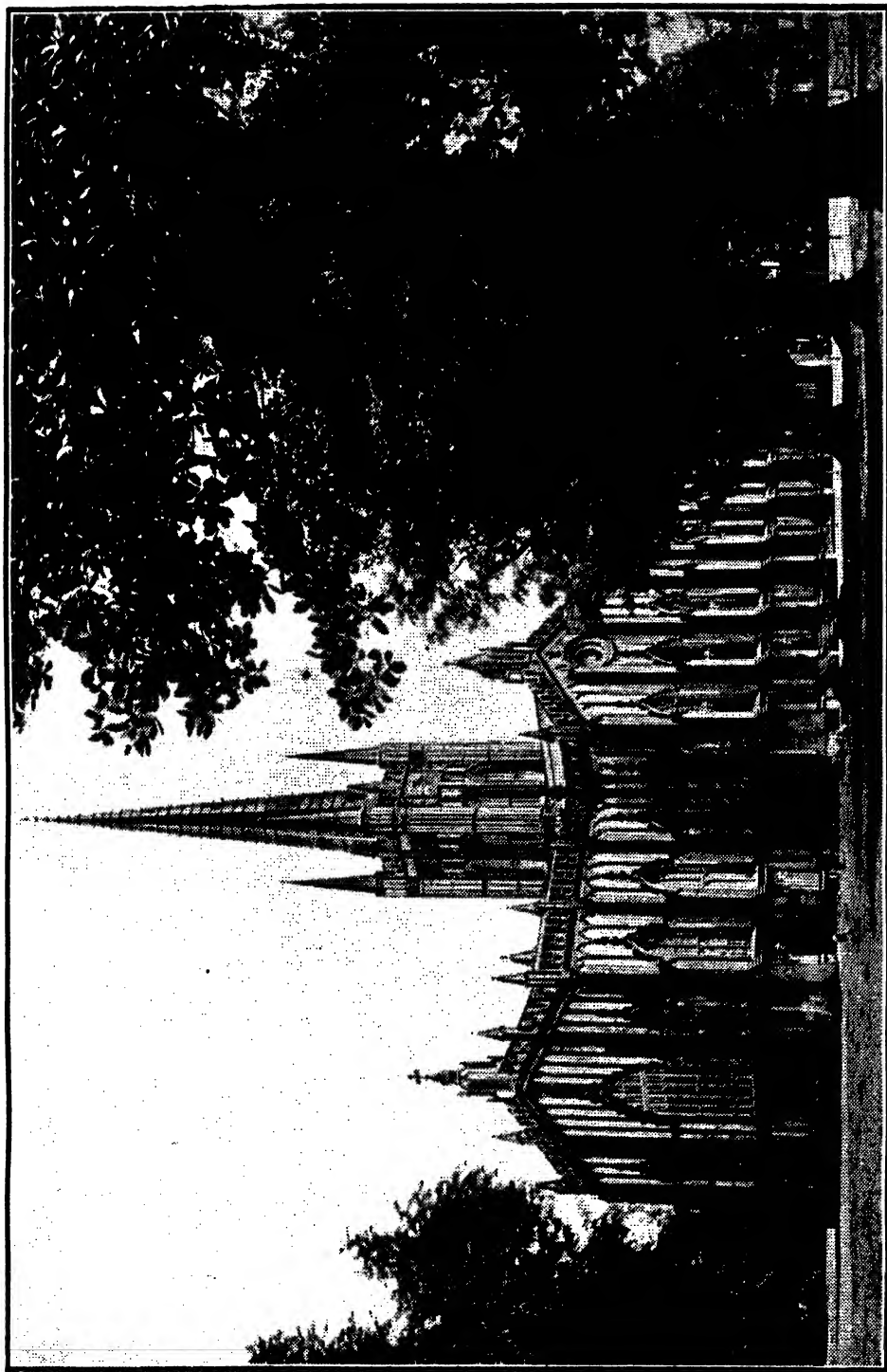
THE CHRISTIAN CHURCH

By the RIGHT REV. BISHOP PALMER, lately Bishop of Bombay.

Let us ask, first, in what ways has the Christian Church touched India? Three waves of missionary effort have reached her shores. The first started from Churches of the nearer East in the first or second century A.D., the second from the Roman Church in the sixteenth, and the third from the Reformed Churches of the West in the eighteenth and nineteenth. They are represented in the Census of 1921 by nearly 1,000,000, 1,750,000, and nearly 2,000,000 Indian Christians respectively. The Churches founded by the Eastern missions and up to the end of the eighteenth century by the Roman allowed caste divisions among their members. They exercised little perceptible influence on the life of India. The missions of the last hundred years, both Roman and Reformed, introduced a new method. They lavished man-power and money on educational and medical work in addition to their evangelistic efforts. Now they include every sort of amelioration within their scope.

In the last hundred years, the period of modern missions, a Christian Government has come to rule five-sixths of India. The British Government, though meticulously neutral as between religions, and though not consisting solely of professing Christians, has introduced ideals derived from its Christian traditions. For instance, it has upheld elementary moral law against immoral customs, even when sanctioned by religion; it has extended material benefits, such as irrigation or protection from famine, to all classes; it has set and exacted a high standard of honest work.

Has this double impact of the Christian Church on India been rendered ineffective by the faults and foreignness of missionaries and Christian officials, or are there signs of a real influence of Christianity on India?



St. Paul's Cathedral, Calcutta, opened in 1847.

(1) The growth of the Christian community is too great to be overlooked. It trebled its numbers between 1872 and 1921. It is not merely a growth in numbers. The mass-movements, which at present are chiefly among the outcastes, have produced in the converts changes in life, manners, and outlook which are in some places attracting the attention of the castes. In South India caste-men are considering the claims of Christianity because of the change that they have observed in the despised outcastes.

(2) At the same time the educated classes, from whom university students are drawn, have for the last five years or more shown a marked interest in everything about Jesus Christ Himself and an increasing tendency to revere Him as one of the greatest of teachers. The teaching of the Bible in mission schools and colleges has familiarized the pupils with its words, which are often quoted with respect in political speeches.

(3) Christian activities and institutions are imitated. A few instances must suffice. It is about a quarter of a century since the great Tilak said at a public meeting in Bombay that the Christian missionaries were the only people who had done what was right by the outcastes, and that it was essential that Hinduism should change its treatment of them and begin to try to do them good. Hindu missions to the outcastes have been started in many places, aiming at their education and welfare, and at retaining them in the fold of Hinduism. Since the reforms, a political importance has been added to this movement. But in idea and method it is an imitation of Christian missions. Again, there is in Bombay a rescue home for women established by non-Christian ladies in imitation of the Christian rescue work done in that city. Greatest of all, the Servants of India—a society of able men, started by Mr. Gokhale, who do educational work for a mere fraction of the pay that they could obtain in Government service—emulates the self-sacrifice of missionary educators who receive only maintenance allowances.

(4) Religious societies have been founded and flourish which either combine Christian with Hindu ideas, like the Brahmo Somaj, theistic, and opposed to polytheism and idolatry and distinguished for philanthropy and an admiration for Christ, or, like the Arya Somaj, champion the ancestral religion by a sort of counter-reformation.

(5) Abuses in the Hindu system which such societies or individuals seek to reform are recognized as abuses mainly by contrast with Christian ideals. Some fifty years ago a Brahman widow who embraced Christianity, Pandita Ramabai, founded in Poona a home for Hindu

widows. Now there is a home for Hindu widows there conducted by Hindus. The ignorance of women and the traditional objection to their education were among the great blots on Indian society. The missionaries were the pioneers in the education of women. Now there is a strong and growing movement among Hindus for this object. The social reformers make attempts to provide counter-attractions to the immoral celebrations of some of the Hindu festivals, which they can no longer approve. Again, in the sphere of thought, "the neo-Hinduism of forty and fifty years ago (associated with the names of Ramkrishna Paramahansa and Swami Vivekananda) sought to give spiritual and symbolical interpretation to those elements of orthodox Hinduism which the modern mind finds objectionable. The neo-Hinduism of the present day [as exemplified by Professor Radhakrishnan] does not trouble to reinterpret these elements. It ignores them as not forming part of the essential Hinduism."

Some of these phenomena will remind historical students of a similar purification and attempted rehabilitation of paganism in the Roman Empire at the time when Christianity began to have real influence on the world. All of the tendencies instanced above are signs that Christ and His religion are a real power in India.

But His Church is of little power, partly because too foreign, mainly because miserably divided. It is futile to retort that Hinduism and Mohamedanism are divided into sects. All thinking Indians know that their country has been ruined by divisions and long for something which might unite them. And Christians cannot offer it to them in the name of Christ.

There are other reasons for which Indian Christians desire unity. Driven together by the menace of the great religious system which they have left, they find themselves one in the simplicity of the faith that they have learned. They cannot understand why they should be divided by the Western divisions, which are the result of controversies in which they had no part and have no interest. The 3,000,000 Indian Christians who live in the south are all Dravidian by race, speak kindred languages, have a common history, and are much related by marriage. With the exception of the Roman Catholics, they have shared much of their spiritual experiences. It was a combined effort at preaching to their fellow-countrymen which led to the meeting of Indian Ministers of various denominations at Tranquebar in 1919, which drew up the first outline of that Scheme of Union which has recently been so hotly discussed in England.

That scheme is a proposal for corporate union of the Anglicans, Presbyterians, Congregationalists, and Wesleyans in Southern India, of whom the Presbyterians and Congregationalists combined in 1906 to form the "South India United Church." The proposed union, if effected, would include 750,000 persons, mainly Indians. The United Church would gladly secure to the British residents in its area the continuance of the services to which they are accustomed at home, as they are given at present.

The scheme has been drawn up by a joint committee of official representatives of the Churches concerned, after meetings extending over ten years. The decisions arrived at were published after each meeting for the information and criticism of those Churches. The scheme was in March, 1929, presented to the Churches for their official consideration.

Two general characteristics of the scheme must be emphasized:—

(1) It proposes a union of Catholic and Protestant, of men and Churches, some brought up in the traditions of earlier Christianity, and others in those of the Reformation. It assumes that India can learn something from both. The scheme assumes further that there is something valuable in all the forms of Church government which have been exemplified in the uniting Churches, Episcopal, Presbyterian, Congregational. It seeks to combine these elements, not to please men, but because they appear to be elements in God's ultimate plan for the universal Church. But all such combination must limit. The exaggerations which have arisen in the isolated Churches must disappear in a united Church. Such a Church will be neither Anglican, nor Wesleyan, nor Presbyterian, nor Congregational, but something better and more universal, and, in time, something more suitable to India.

(2) The other main point of the scheme is novel. Its authors find (as they think) enough agreement in belief, opinion, and practice to justify union, but they are content to leave questions on which they cannot now agree to be settled after union, and under the influence of the unity which union will bring. That unity is not an artificial unity like that of some of the States created by the Treaty of Versailles. It is, to the Christian mind, the God-made unity of the Body of Christ, which will become more visible and more actual to the uniting Churches. This supernatural unity will reinforce the new friendships and new collaboration that the union of the Churches will make possible. In such an atmosphere truths now hidden by controversy will break out clear. With these hopes the scheme leaves for future settlement such

matters as the true theory of episcopacy or the place of confirmation in the life of the Church.

Thus the union of Churches will not complete but begin their unification. Two rivers often remain distinguishable by differences of colour for some way below their junction, though flowing together in one bed, but at length they are completely mingled, and there is but one river. The union intended by the scheme will be a confluence of Churches.

While these leading ideas have not yet attracted the notice that they deserve, attention has been riveted on the proposed arrangements about the ministry. The Church, as united, will adopt the ancient rules of ministry. There will be Bishops exercising their historic functions, in consultation or cooperation with clergy and laity. Bishops will be themselves consecrated by Bishops, and will be the only invariably necessary ministers of ordination. Only Bishops and presbyters will celebrate the Holy Communion. These will be the rules of the Church. It is proposed that at the beginning the Church should make exceptions to these rules by allowing those of the existing ministers who have not been ordained by Bishops to continue their ministrations of the Word and Sacraments, and for thirty years the non-episcopal missions concerned in the union to send out ordained ministers of their own Churches as missionaries. There will be an honourable understanding that existing ministers will not be located where their ministrations will be unacceptable. If Church laws or rules admit of no exceptions, the scheme is wrong. But its framers would submit that all laws made for man admit of exceptions (as Christ pointed out in regard to the Divine law of the Sabbath), and that, further, hearty respect, even for good laws, can be maintained only by making the proper exceptions.

The whole scheme is proposed by men who have courage and hope solely because they are convinced that God wants His Church united and will prosper their efforts for unity. They are aware that, if successful, their union would unite only one-seventh of the Christians in India. But it would have an importance beyond numbers. The deepest rift in Christendom is between Catholic and Protestant, and this union would have filled up that rift at one point. The opening paragraphs of this article showed that Christianity had been planted in India by the Eastern Churches, by the Roman Church, and by the Reformed Churches. Have these Churches been brought together in that distant land in order that from there the healing of the divisions of Christendom might begin?

CHAPTER V

THE SYSTEM OF EDUCATION

By ARTHUR I. MAYHEW, C.I.E.

The system of education transferred to Provincial Ministers and Legislative Councils in 1921 had achieved some, at least, of the aims formulated by Macaulay and Bentinck in 1835. It had left an indelible mark on Indian administration, provided amply for the need of the liberal professions, and contributed to the material and economic development of the country. Indian society had been invigorated by new ideals of service through contact with Western thought and the influence of Christian mission schools incorporated in the educational system. Politically, India had become self-conscious, aware of the need for unity, and a candidate for Dominion status. During the twenty years that preceded the transfer of control an unprecedented increase of expenditure quickened the rate of expansion and raised the standard of instruction. Public interest in education became active and intelligent. Candid criticism had exposed the failure to produce any substantial effect on the agricultural population and the women of India. Moreover, our conceptions of secondary education had been too narrow and our neglect of indigenous culture had robbed India of the joy which a nation wins from the growth of its spiritual and artistic life.

No clear plans for the removal of these fundamental defects had emerged by 1921. And the Government of India did not realize that problems which had baffled for so many years their expert staff were not likely to be solved by Ministers deprived of all expert advice save that which their overdriven and understaffed heads of departments could offer. Before long the assistance of the Central Bureau of Education and the All India Advisory Committee was taken from them on grounds of economy. Ministers thus situated, with short and precarious tenure of office, in an atmosphere of political unrest and financial stress, could not be expected to make any fundamental changes in the system they inherited. The fact that no such changes

have been vigorously urged by their supporters suggests that the system was, perhaps, in closer touch with popular sentiment than its former critics would have admitted. Against Westernizing tendencies there has been no reaction. The more extensive use of the vernacular as a medium of instruction is educational, not racial, in origin.

The period since 1921 has been one of steady development on established lines. More pupils were added to the rolls between 1922-27 than in any preceding quinquennium. Quality as well as quantity has received attention, but as pupils increase the numerical inadequacy of the administrative and inspecting staff has become more obvious and the need for a properly organized provincial service to replace the expiring Indian educational service more pronounced.

For some years it has been clear that primary education on its present lines is of little use in the campaign against illiteracy. Despite a large increase in cost per pupil and enrolment, the next Census is not likely to show a substantial advance on the increase of 1.4 per cent. in literacy percentage than was effected between 1891 and 1921. In the latter year only 14 per cent. of the male population over five years of age were literate.

More than half the total expenditure on boys' primary schools is wasted because so many pupils fail to complete the primary course, and a large percentage of those who do complete it show by their examination results that they have got no permanent profit from it. Irregular attendance, a short school life, and the obstacles to efficiency existing in the numerous single-teacher schools are as disastrous in their effects as the educational apathy of the agricultural classes. It is these classes, and to a lesser extent the unskilled labour classes in the towns, that constitute the problem. In populous areas the "literacy" castes and those who need education for a livelihood are being enrolled and taught with an ever-growing measure of success. But 74 per cent. of the population is agricultural, and 70,000,000 live in small villages where, under existing conditions, efficient education is well-nigh impossible.

Since Ghokhale's campaign of 1911 Enabling Acts in all Provinces have led to the partial introduction of compulsion, for boys only, in 119 municipalities, mostly in three Provinces, and in 1,571 rural areas, mainly in the Punjab. In the more progressive areas where it has been applied education has become more economical and efficient. But a wider and effective application of compulsion is unlikely till Provincial Governments assume financial responsibility and arm themselves with

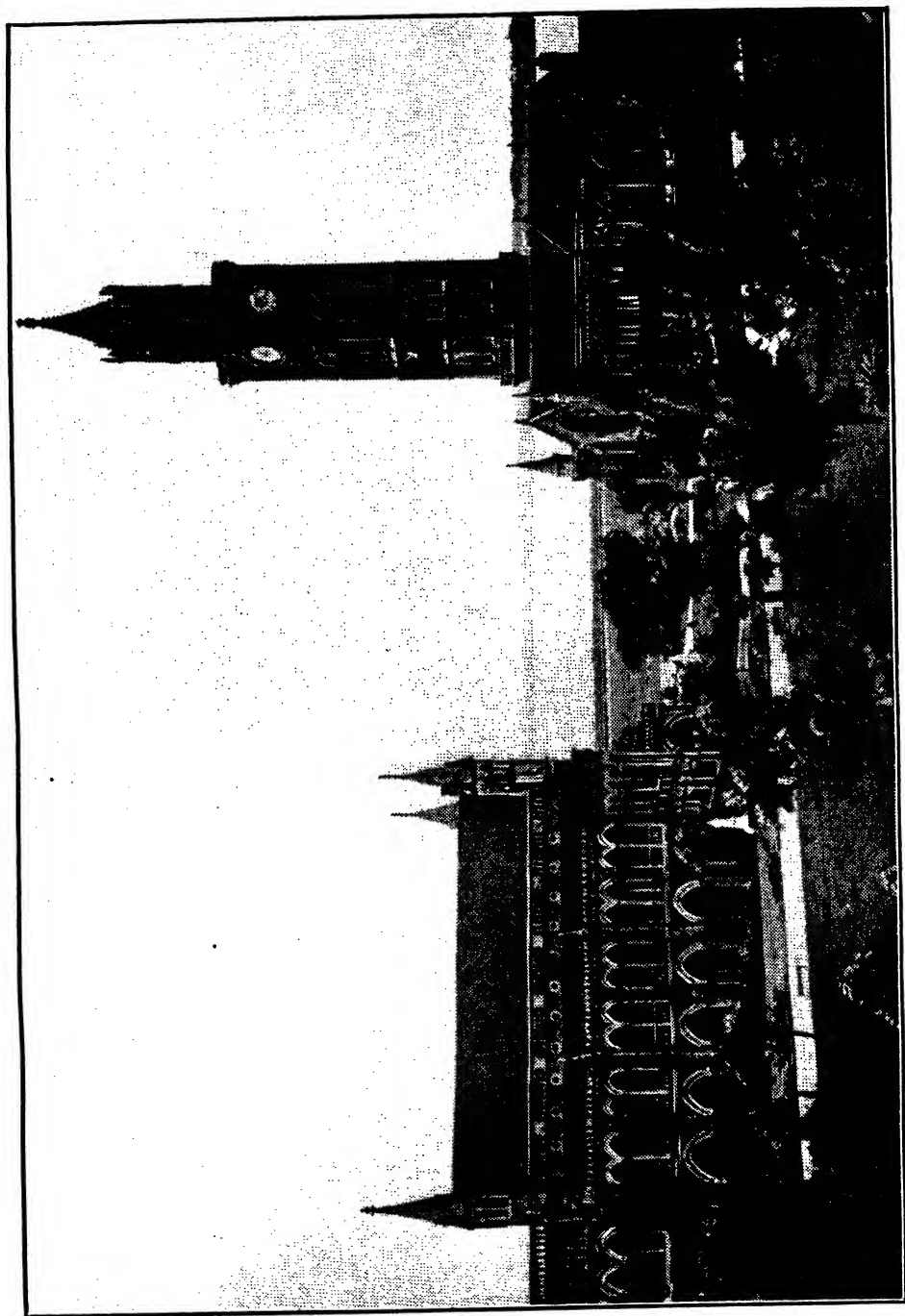
coercive powers. The local authorities, who are far more independent than those in England and Wales, lack the experience and staff of the latter as well as the expert guidance of a Board of Education.

In secondary schools for boys improved salaries, more extensive training, improved curricula, increased provision for science, manual training, hostels, and games have raised the standard of work and affected the atmosphere of school life. But examination results still show that many pupils are unfit for the type of education provided. What is wanted is not the conversion of schools that supply at present a foundation for academic studies and professional training into vocational schools, but a closer co-ordination of general with vocational education, a richer variety of secondary schools, and the means of diverting boys at definite stages from thoughts of Government service or the liberal professions into other equally honourable careers.

Universities since 1900 have grown in number from five to fifteen. Some of the new universities confine themselves to the teaching and examination of students concentrated in the academic area. The other universities, with fewer colleges, distributed over a smaller area, to superintend, and freed by school certificate boards from most of their matriculation work, are beginning to direct and influence collegiate teaching. University chairs have been established, and research work advanced. Constitutional reform on lines suggested by the Calcutta University Commission is having its effect on administrative and academic functions. But these favourable conditions for the advancement of learning and sound instruction of competent students are impaired by the claims on their resources made by those who crowd into the colleges without any bent for academic studies or hope of ultimate success. Of those who complete the secondary course, 59 per cent., and in Bengal 80 per cent., proceed to the universities. The corresponding percentage from aided secondary schools in England and Wales is eight.

For the specialized training required by the liberal professions and technical departments of Government provision is ample and sound. A larger enrolment in the Agricultural Colleges presupposes a demand by large landholders for expert agents which will perhaps result from the education of these classes.

The Governments generally are ready to develop other types of technical education in response to a demand for skilled foremen and supervisors in existing or potential industries. But several Commissions have insisted rightly that such education is the handmaid, not the



Bombay University Senate Hall and Clock Tower.

parent, of industries. A close and useful connexion has been established between the educationist and the employer of labour. Commercial education, which in Bombay proceeds apace, has, like agricultural education, begun to enjoy the prestige and advantages of academic status. The development of higher technological training, particularly in mining and forestry, depends partly on funds and partly on the ability of the Government of India to co-ordinate the needs and enlist the support of the various provinces. In the Pusa Agricultural College and the Tata Institute in Bangalore a start has at least been made.

The agricultural high schools of the Punjab are a recent and interesting experiment in the co-ordination of vocational and general education in the secondary stage. In yet a lower grade the sixty-six middle schools of the same province that combine a vernacular education with instruction on a school farm earned the praise of the recent Agricultural Commission. Attempts to impose agricultural instruction on a primary course have been wisely given up in favour of a less ambitious attempt to establish a rural bias.

In 1921, 982 women in every 1,000 were illiterate. Despite an increased school enrolment of 30 per cent. in five years, and a still larger increase in expenditure, the next Census can hardly show a substantial advance. In no province does more than one girl in five attend school, and two-thirds of the primary school pupils spend only one year there. The average number of pupils in the top class is two. The short school life, irregular attendance, and quite inadequate supply of competent teachers, deprive most pupils of all permanent benefit. With only 7,000 girls in the high school stage, and less than 2,000 women in university classes, the training and supervision of staff for even a small fraction of the school-going population of 18,000,000 is difficult. The quality of higher education is steadily improving, and a gallant handful of educated Indian ladies is beginning to exert an influence on public opinion. But progress will be almost imperceptibly slow till not only the marriage customs, but the whole fabric of Indian Society and its attitude towards women has been fundamentally changed by the spiritual forces now at work. Much has been done to make higher education more attractive and accessible to the Mohamedan and Anglo-Indian communities.

In the socially "depressed" classes, despite a very genuine effort by all Governments, not more than 5 per cent. of the school-going population is as yet enrolled in schools. Higher education is for them merely a name. Persistent attempts to enforce their right of entry into

all schools produce but poor results. An increase in the number of special schools for these classes is open to criticism as a concession to caste prejudice. Though it is still true that neither Government nor any other agency can offer to these classes the magnificent opportunities afforded by the work of Christian missions, there are now societies that show in their aims and methods the influence of Christian ideals on thoughtful Hindus.

Mission institutions have been an important and integral feature of Indian education since 1854. In 1921 nearly 20 per cent. of the scholars enrolled in Madras Presidency were in these institutions, and 14 per cent. of the total expenditure on education was from mission funds. They have been pioneers in agricultural settlement work and have drawn from the Government of India, which officially takes no cognizance of religious instruction, a declaration of the value of education based on religious foundations. In all stages of educational work they have won the confidence of India, and there are no signs that they will lose under Ministers and Councils the support they enjoyed under the old regime. Aided institutions under other management are growing in number and usefulness. But too many depend mainly on grants and fees. They will not acquire the stability of mission institutions until non-Christian benefaction becomes relatively as important an educational asset as the endowments and subscriptions raised by Christian missions.



Women of Balghatty, Cochin.

CHAPTER VI

MODERN INDIAN LITERATURE

By Dr. N. MAGNICOL

Early in last century the character and direction which modern Indian culture should take was determined in Bengal after a bitter conflict between those who were called "Orientalists" and those who were called "Anglicists." The partisans of both those policies were agreed that the ultimate aim of whatever system was adopted must be the vitalizing of the languages of the people. A century has passed, and we can now review the consequences from the policy then adopted. How far has it been successful in creating literatures in the various vernacular languages?

The creation of a literature is necessarily dependent upon the demand for it. If a people have no love of learning or tradition of culture, the conditions are inevitably unfavourable to a sudden awakening of literary interest. In this matter we must expect to find wide divergences between various language areas in India. In some the literary tradition has been continuous through the centuries; in others this has been much less the case. The Bengali has always wielded the pen; but to the Rajput this weapon has been far less familiar than the sword. It is true, at the same time, that we can claim generally for India, in the words of Dr. F. W. Thomas, that "there is no country where the love of learning had so early an origin or has so lasting and powerful an influence." In few lands can the climate and the soil be more friendly to the growth of a great literature.

There is, however, another condition which must be fulfilled ere we can expect to find literary interest and activity general among any people. There must be a body of readers whose needs are to be supplied. It is here that India comes short. Ninety-two per cent. of the village people in India are illiterate, we are told, and of the total population only one in ten is reckoned as belonging to the literate class. These are facts which must be kept in mind lest we form too high expectations of the literary output of the Indian vernaculars.

It must not be forgotten that the vehicle of the ancient learning, as well as of poetry and the drama, was Sanskrit. The prestige of know-

ledge, sacred or secular, attached itself to that language only. It is only within the last six or seven centuries that a literature in the vernaculars has arisen, and that literature was until recently almost wholly poetical in form and religious in subject. Before a modern literature could arise it was necessary to create the prose medium that it should mainly use; it was necessary also to transform the whole literary outlook by introducing new themes and new vehicles of literary expression. The very contact that came so suddenly and in such abundance between the old cultural modes and those brought to the land by the invasion of the civilization of the West produced at first bewilderment and paralysis. The process of assimilation of the new literary influences and of readjustment to new literary ideals was of necessity slow. In some areas, such as Bengal, where the minds of men are supple and agile, this readjustment has been more rapid than elsewhere. In some other areas we are only seeing around us now the emergence of a new literature that is more than an echo of foreign voices and that is beginning to wield the vernacular weapon with a real accomplishment.

The fashioning of a prose instrument fitted for modern uses, for the writing of history, of romance, of political journalism, has been one of the main achievements of the literary travail of the past three-quarters of a century. It cannot, indeed, be claimed that a stable equilibrium of expression between the dignity and prestige of Sanskrit or Persian on the one hand, and the homely effectiveness of the vernacular forms on the other, has as yet been attained. With the continual influx of new knowledge into the languages there is need of a reservoir of learned speech to draw upon, and Sanskrit serves this purpose in the case of many of the vernaculars, just as Latin and Greek have done in similar circumstances in English.

To an increasing extent, as English ceases to be the sole medium of higher education, technical handbooks in science will be required and are already appearing. Not only so, but every department of literature and learning is expanding under the influences that, accompanying Western culture, are sweeping in upon the land. The old forms of literature had become to a large extent stereotyped and canalized by the rigid rules of Sanskrit or Persian literary tradition and orthodoxy. That situation has now been transformed.

The new forces that are at work in the India of to-day have produced much activity and confusion in the regions of at least the greater vernaculars; new word forms are being introduced continually, new phrases fashioned, and new styles of literary expression accepted

as the mode. At one time the prose model that is adopted is that of Dr. Johnson; at another it is that of Macaulay. In poetry they used to have in Bengal their Byron, their Milton, their Shelley. That period of literary imitativeness and anarchy has now, however, largely passed. The influences that for a while were overwhelming are being assimilated and controlled and the vernacular literatures are finding themselves once more.

The emergence of this new phase of literary activity has been in large measure brought about by the powerful influence of the nationalism of to-day. The danger lest the new vernacular literatures should content themselves with being lifeless echoes of Western voices has been overcome. They are finding themselves in the midst of the new formative forces that have invaded their land and a real renaissance seems to be coming, or, in some cases, to have already come.

The most advanced, perhaps, in literary activity of all sections of the Indian population, the most volatile and the quickest to respond to new influences, are the Bengalis. Of these the most notable was the great Bengali herald of the dawn, Raja Ram Mohan Roy. "He produced," Mr. E. J. Thompson affirms, "the first Bengali prose which can claim permanent place as literature." The novel arose and produced "the Scott of Bengal" in Bankim Chandra Chatterji. He was too forceful a personality to be a mere Bengali echo of any novelist of the West. In Marathi there was a period when translations and adaptations of the novels of the West held possession of the field, but presently a real indigenous novelist arose in the person of Hari Narayan Apte, and with him, as with Bankim Babu in Bengal, the novel became rooted in the soil.

As with prose so also with poetry. Bengal gave a lead to the other vernacular literatures. "The Milton of Bengal," Michael Madhusudhan Datta, exercised a commanding influence and was accepted by the Bengali pandits as following the true tradition of their literature. It was different with Rabindranath Tagore; the variety and abundance of his literary output—prose and poetry, novel, drama, lyric—make it difficult to estimate as yet his place in literature, but that it will be a high one, even judged by the standard of any land, can hardly be doubted. In the opinion of one of his interpreters, Mr. E. J. Thompson, Kalidasa and the Vaishnava lyrics have chiefly influenced his poetic growth, and only after them Western literature. "The Bengal Shelley" is no echo of anyone but a poet, and a man of letters who, internationalist as he is, is essentially the possession of his own land and his own province.

A closely similar service has been rendered—though on a less impressive scale—to Marathi literature by Narayan Vaman Tilak and Keshavasut. What they have achieved may be indicated in the words of an able student of Marathi literature, Professor W. B. Patwardhan, “Polished elegance of language and harmonies of sound . . . passed for the highest poetry before the advent of Tilak, Keshavasut, and their school. Mr. Tilak was among the first to break away from the trodden path and introduce innovations, both as regards metre and conception. He led Marathi poetry out of doors and taught her to realize the free, open, and bracing air of Nature. The new school of Marathi poetry has taught poetry to live and move and have her being in this world, in the realities of material life. The might and mystery of the known world lent a fullness and wealth to the new song never before dreamt of.”

What has happened in the case of these two great vernaculars of the East and the West, Bengali and Marathi, has been happening in a measure in almost every vernacular. There is, for example, we are told, a new Telugu poetry, filled, like the poetry of Tagore and N. V. Tilak, with “a spirit of simple fellowship and communion with Nature.” The novel has made its appearance everywhere. Nationalism has supplied an incentive to research in the older vernacular literatures and to the re-writing of Indian history from the Indian point of view. The cult of Shivaji is producing a considerable number of historical works in Marathi dealing with his period. B. G. Tilak’s “Gitarahasya” has had an immense popularity, due in part to the place its author holds as a political leader in the hearts of his fellow-Marathas, partly to the place of the “Bhagavadgita” in the Hindu revival.

The drama also has an immense vogue in the India of to-day as an instrument of propaganda, whether in the cause of Nationalism or of social reform. Babu Harischandra, of Benares, who is credited with the production of 175 Hindi works, has been called “the founder of the modern drama in India.”

That there is to-day a new vitality in the literatures of all the great vernaculars of India there can be no doubt. What Messrs. Chenchiah and Bhujanga Rao say of Telugu applies far beyond that area: “The reanimation of fading energies, the rekindling of hope—in short, the rekindling of youth and vigour—are among the spiritual gains of contact with world-thought.” The soul that is being reborn in the land is finding utterance, and accordingly the vernaculars are everywhere awaking to new life.

CHAPTER VII

AN INDIAN VILLAGE

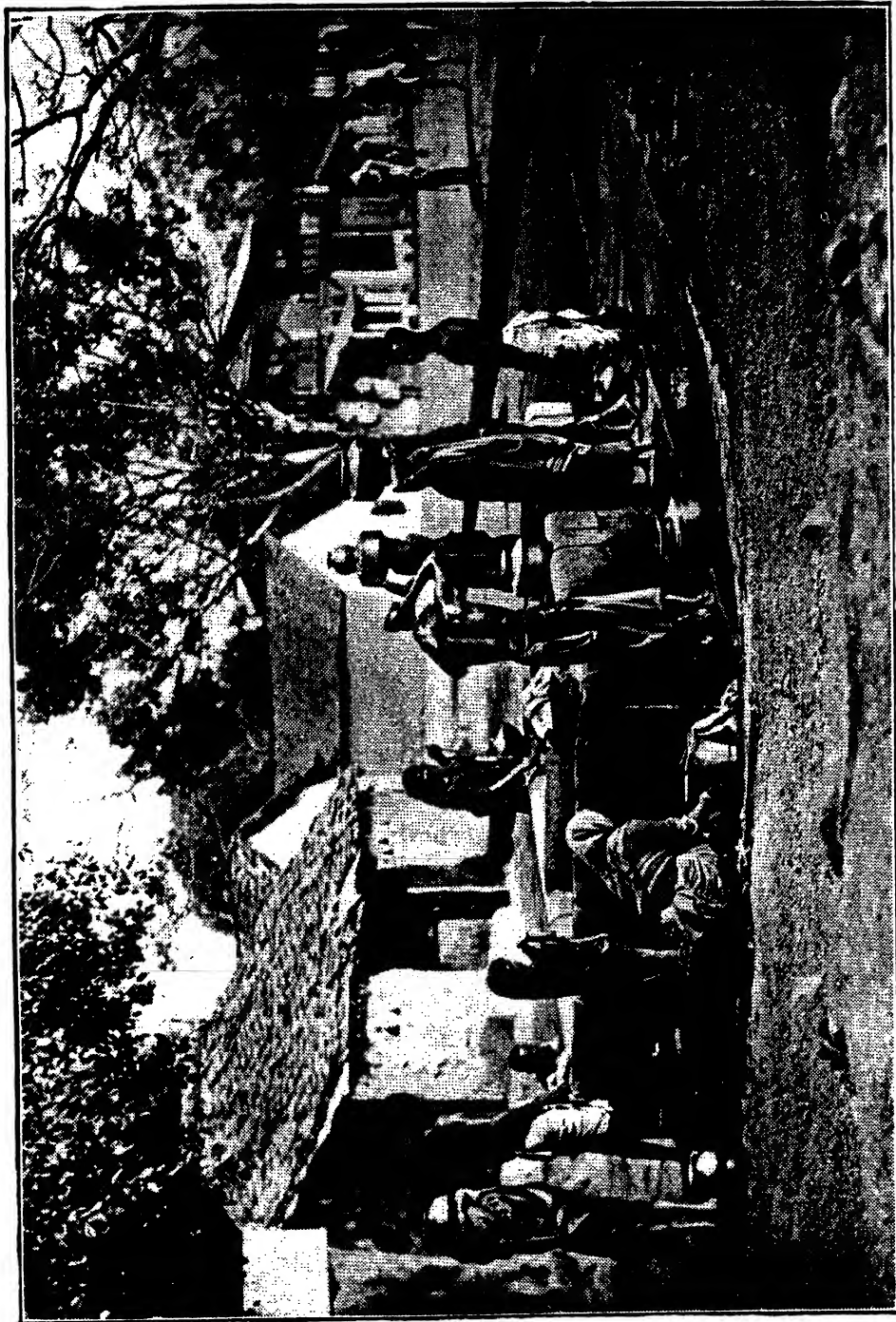
By SIR WALTER R. LAWRENCE, Bt., G.C.I.E., G.C.V.O., C.B.

The days of heat had come of a sudden. In India we have no pleasant word like summer. Fool that I was, I thought that it would be cooler out in camp than in my baked bungalow. But the very moon was hot and mocked at me as I rode over the shorn, silvered fields that looked so cool, yet sent up hot puffs reeking of the grand crops which had been gleaned to the last grain; past the mimosas and the flowering trees, which play at spring and breathed down hot whiffs of heavy scent as I cantered by.

They had pitched my tent by a pipal tree near the village; but I could not sleep. The smell of a hot tent clings and chokes. In the village, too, they were praying for the night to end, when the bats, the evil spirits, and the fearsome flying fox would cease from troubling.

They say that on a far-off mountain a jackal paces, waiting for the dawning of the day, and when the red rim shows he yells to his brother in the lower hills: so the cry comes to the sugar brakes and the burning grounds by the dry river beds, and on to our village. The jackal on the cold mountain is late this morning. What is his message? It tells of fear and pain: not like the Moslem call to prayer: not like the mist of bells which moves on a Sunday morning across the English meadows. It is harsh and hostile, "Get up and work; ill or well, weak or strong, get up and work."

So I get up and go into the village, like all other villages in Northern India—a brown clump of flat-roofed mud huts just above the level of the never-ending plain. The very dogs are too faint to bark, and the children too tired to cry. For a moment there is a brief, beguiling breeze that comes at dawn, sure prelude to the scorching day. The villagers are moving slowly, like the buffaloes and cattle which pass me—sleepily, dustily, sulkily. It is better out than in. Nothing to do in the hard, dry fields, but better under a tree by the well and away from the



At the Well in an Indian Village.

stifling hut where the brain reels as the wife spins her cotton on the wheel, and the mosquitoes strike from the dark corner. There are mosquitoes under the tree, but their drone is less shrill, less spiteful.

I see an old friend, grey-bearded, with a kindly welcoming eye. He is eating the scanty remnants of last night's meal, poor scraps of unleavened bread. I sit down by him on his pallet in the village square, under the acacias; there is a rich smell of tepid buffalo and cloying cow, and uglier smells besides. My friend will talk and tell me the same stories that I hear in every village. On such a morning it is better to listen than to talk. "Yes," he says, "your Honour speaks true words. The jackals are late to-day. In the cold season they are always too early; with our blankets over our heads and the hurdle across the door we could sleep on. But the cattle must go to the grazing grounds and we must go to our wells and our fields. Last night we moved our beds into the yard, we who have yards; and some of us slept on the roofs, when there are steps to the roof. No, we have no stairs and windows, not even the banker and the headman, whose houses are built of real fire-baked bricks, not sun-dried bricks such as we use. Still, my house serves. I was born there and I shall die there, on the floor, not on the bed. Let me show it to you. That is the hearth—that makes the home. It is for us alone. Our women cook and make the butter over that little fire of cowdung which smoulders so steadily and so safely. The children gather those fuel cakes and dry them on the wall in the sun. Wood?—too dangerous, some one would have to watch it. Oh, yes, I know that the cowdung were better on the fields. But we must eat or die. Not much furniture; just the bedsteads and that chest there. It holds nothing you would care to see. That coloured picture on the wall came off a piece of fine cloth I bought years ago when there was a marriage—a picture of the great, the Widow Queen. We do worship to it every day.

"No, we have no pictures nor flowers in our home. But on the Feast of Light we brighten our walls with whitewash, and when the little lamps are lit this house is very shining, almost like a fairy's palace. That day we all gamble. 'Lucky on the Diwáli, lucky for the year.'

"Well! I am boasting. But every bird is happy on its twig.

"We cannot tell you how old the house is. But when it falls down we soon build it up again; and when the famine comes, or the cholera, or the plague, we go off, and the houses soon melt away in the rains. Yes, as your Honour says, we are always rising above the level of the plain. They say that in old days we were a wandering folk, and we are ready to wander when God wills. But we must come back to this house, and

to our own fields, which are ours, as you will see if you ask the banker, who lives in the brick house close by and has the village books. We must get on with our banker and our headman—‘If you live in a tank, you should get on with your alligator.’ If they misliked us they could move the boundaries of our fields, and alter the entries in the map and the book, and we should have to make a long march to see the Sahib in the big town—a great expense, for all the office people want something. Yes, we are miles away from the road. There is a path leading to the next village; but I have never been out of my own village. Why should I? We have all things here save salt, and spices and fine cloth. Narain Singh went away to Bombay and saw the black water, and was mad when he came back. He was mad to have gone; but young men get maggots in the brain.

“It is a fine village, ours. We have everything here. The best craftsmen in the world. They are not of our class, land folk. They are the lowly ones, and live in those poor shacks which you saw as you entered our village. But such work! No better carpenter, weaver, tanner, blacksmith to be found anywhere. Look at the earthen pots that went to your camp last night. We are proud of those pots. But if I may tell you in secret fashion, don’t trust our oil-presser. You have heard the story of my grandfather and the oil-presser’s father? Every child here knows the story. You were not here in the Mutiny? Well, it was before the Mutiny, when the bad winds blew. My grandfather had grown the finest crop of linseed ever known. They talked of nothing else at evening in the village square, as they sat smoking. So my grandfather took his linseed to the oil-presser and said, ‘I want all linseed oil.’ ‘Without doubt,’ said the oil-presser. When my grandfather went to bring his oil home it was mixed by that evil one with rape seed. So he went to the oil-presser and said, ‘What is this thing?’ ‘Just oil,’ said the oil-presser. On which my grandfather gave him abuse. You know what *gáli* means? Well, ever since there has been hate between us and the oil-presser, and if I am murdered or robbed, or the oil-presser is murdered or robbed, the police will know where to look. No, we cannot make peace. I should lose my honour. Do I still grow good linseed? Wah! wah! Your Honour knows, for you have seen our crops, that since the Mutiny the crops have failed; stalks and grass and nothing else. But don’t say a word of me and the oil-presser. There he is, watching us with his squint eyes.

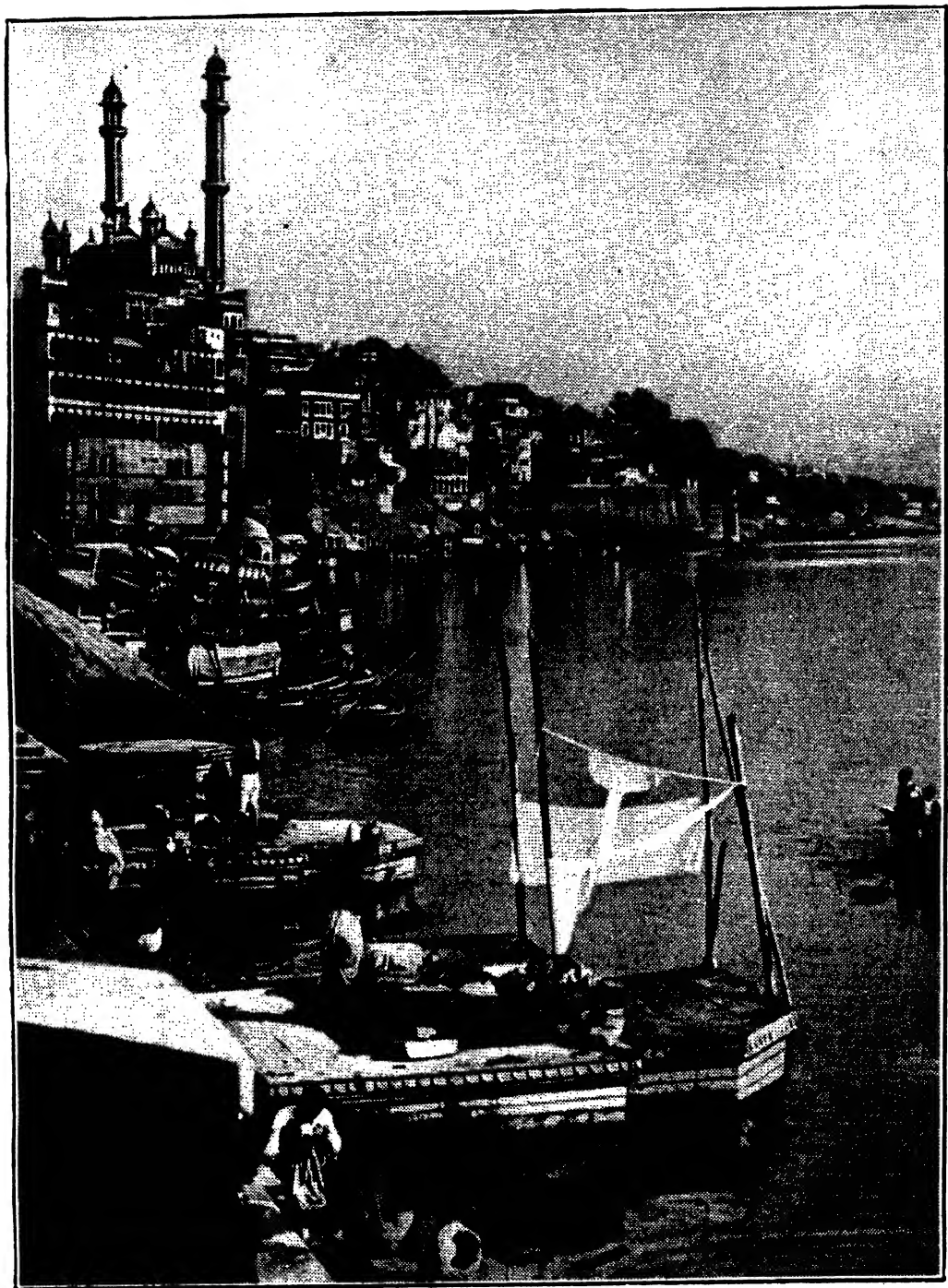
“Yes, we have good craftsmen. And we have a temple and a priest. No, he does not say much to us—just ‘Rám, Rám.’ But if we don’t take

THE PEOPLES OF INDIA

him meal and oil, and red pepper, he looks much. He is a tiger then, and would drink our blood. And the Faqir, who sits under the tree near your tent. He says nothing. But if I pass him empty-handed, his lips move, and his eyes say evil words. I could get to my fields by going around. But the near way is past your tent, and if your Honour is going to see my fields I will go with you. For the Faqir will not look up when your Honour passes. I will walk on your left."



A village cart.



The Bathing Ghats of Benares, with the Minarets of Aurangzeb's Mosque.

PART VI

THE INDIAN PENINSULA

CHAPTER I

A LAND OF MANY CONTRASTS

By ARTHUR MOORE, Member of the Indian Legislative Assembly

Before I became a traveller I used to think that Persia and Afghanistan lie to the north of India, and perhaps there are others who think so still. When I went to these parts I made discoveries all my own, and felt as much a stout fellow as Cortes on his peak in Darien when I observed that these countries lie west of India, and that Russia is the truly northern neighbour. And, of course, Russia in Europe, as well as a vast stretch of Russia in Asia, is also altogether west. Aden, which is west of Bombay by five days' steaming, is about due south of Tabriz in Persia, or Tiflis in Georgia, and if you run up to Chitral you are farther north than either Kabul or Teheran. You are also on the roof of the world, and hereabouts the orographical map of India shades into that dark tint which overspreads Tibet. It is the last effort of the perspiring chameleons in the Survey of India, before they burst into the plain white which means that everything is either over 18,000ft. or under sea level, and has got them beaten.

In these parts you feel as if you had discovered the North Pole, and actually if you go to Gilgit you are as far north as is Malta, Gibraltar, or Tokyo. Lahore is farther north than Cairo or Basra, but Delhi is farther south than either. Calcutta is about due south of Tomsk, in Siberia, and is so far east that Teheran is half-way between it and Paris.

By this time we are on the great plains. From Dera Ismail Khan, on the North-West Frontier, or from the outskirts of Lahore, you can travel for a thousand miles, and reach Bombay, without ever going more than 600ft. above sea level. From Agra to Calcutta you can do the same. But not yet have you touched the real tapering body of the pear in this pear-shaped peninsula—Central India, the Central Provinces, Bihar and Orissa, Hyderabad, Madras, and Mysore. Most of this is higher than 1,000ft., and on occasions runs to thousands in the plural, but Travancore and the Carnatic bring us back to many

hundreds of miles of low-lying plain. Here we can run south to within eight degrees of the equator before we step off on to Ceylon.

Such, in brief, is the great Indian Peninsula, the living opposite of the *insularum ocellus* which stole Catullus's heart. Here, behind the gleaming rampart of untrodden Himalayan snow, India, continent or country, stretches her enormous surface to the sun in a sea of dazzling blue. In her you will find all things, and all sorts and conditions of men. Here are the tall warriors of Islam with eyes like live coals, men who live by the rifle and walk with the gait of kings of old. "Ha, Sahib!" they cry, and greet you with a handshake that combines delight in welcome with lordly independence in a way that Parliamentary candidates would pay gold to possess. These speak Pushtu or Persian, and all the long miles from Quetta to Malakand they bestride the frontier and swagger through the bazaars. In Peshawar the caravans bring the trade and traders of Bokhara and Samarkand; and a host of tribal intrigues and all the gossip of Central Asia, of Tajiks, Turcomans, Afghans, and Persians are murmured over infinite tobacco in the caravanserais. Yet it is not in this moss-trooping border *milieu*, where the blood feud still preoccupies the Pathan and the Mahsud's home is, more literally than the Englishman's, his castle, that the Indian Army finds most of its recruits. Sir Robert Sandeman long ago pacified Baluchistan and turned Baluchis into soldiers of the Queen, and, now that the Rawlinson "half forward" policy of making roads and holding the strong points of Razmak and Parachinar in tribal territory is gradually Sandemanizing the North-West Frontier Province, it, too, may become a great recruiting ground.

But at present the soldiers come from farther south. You can see the types in the bazaars of Northern India, Punjabi Musulmans, Sikhs, Garwalis, Dogras, Jats. Rajputana, a land of principalities and princes, is the home of the flower of the Hindus. Here are the men who descend from the sun, with birth and breeding written on their noble faces. Rajputs reign over Kashmir and beyond the border they rule Nepal, and have for their subjects a famous race of tiny warriors, the Gurkhas, who serve in their own battalions in the Indian Army and then return to their native Nepal. From Rajputana come also the Marwaris, orthodox Hindus born with a *flair* for a profit in business and a passion for taking risks. From Bikanir, in the desert, they travel more than a thousand miles to Calcutta, even as Aberdonians fare to London, and there they oust from his own business the legally-minded Bengali. The Sikh drives the Bengali out of the taxi trade and other occupations,

and the Kabuli Afghan comes with a big stick to lend him money or make him pay interest.

For Hindustan is a world of movement. Pilgrims of religion or politics or business are for ever on the road or in the trains; here to-day and gone to-morrow. At the Delhi horse show you will find dealers and farmers from the Frontier, the Punjab, the United Provinces, and Bombay. To-day, exactly as of old, some "little friend of all the world" may find the man he seeks in Lahore or Lucknow, or a word of power may be whispered in his ear in Simla or Bombay. Gujarati Parsis dominate the "city" in Bombay, and elsewhere are a power, but in Bombay also the Khoja Moslems, the followers of his Highness the Aga Khan, understand affairs, and Bombay men are less indifferent to big business than the Bengali, who, however, has shown on occasion that he can make a merchant prince.

Kashmiri Brahmins, powerful of intellect and pure in blood, are the law-givers of the United Provinces, and play a great part in politics. The Madrasi Brahmin goes everywhere, but in his own province has not learnt to accommodate himself so well to non-Brahmins as have the Brahmins of Bengal and other provinces. Madrasis move freely, and you will find them in journalism and at the Bar in Bombay, Calcutta, and Allahabad. In Burma the jolly easy-living Burman and his capable little wife, who runs his affairs, are squeezed between the Madrasi and the Chinese immigrant. But the Chinaman marries a Burmese, and settles in the country, producing a good type of citizen. The Madrasi sends his money across the Bay to the old folks at home, and eventually goes back there himself.

The hills that stand guard towards China breed little men and women with almond eyes; through the passes of the north-west tall Musulmans have poured in. Farther towards the noonday sun we find small men and dwarfs in the forest clearings. The physical differences between Musulmans and Hindus are in some cases small, where racially they are one, as among Rajputs and largely in Bengal. Elsewhere they are marked and are the outcome of race, religion, and diet. Broadly speaking, they are the differences between militant meat-eaters and pacifist vegetarians. In the hill tracts of Assam and towards Tibet there are tribes profoundly interesting to the anthropologist, such as the Abors and the Nagas, who retain their own primitive animist religions; and in the heart of India, in the forest villages, the Sonthal and other aborigines, who hunt with bows and arrows, keep alive the pagan fire.

But in this land of religion there are four great forces: Hinduism in the largest sense (with which we include Buddhism and the Sikh religion, both of which it truly claims to have produced and in its present form still to include), Islam, Christianity, and Zoroastrianism. Over all India broods the mystery of religion. European Christianity suffers a sea change and recovers the sense of mystery which weakened in Renaissance Europe, and therefore it is from India that the urge for unity in Christendom comes. Diverse races, tongues, the clash of creeds, the strife of politicians and of interests, justify the view that India is more continent than country. But that is not all the truth. Englishmen at any rate have now for two centuries thought of it as one country. They have given it a common law, a central administration, a *lingua franca*, a single tariff system; they use large maps. Of their begetting it is that the Indian mind has conceived the idea of a nation. Part of their evolutionary function is now to be an irritant to Indian nationalism, their own sturdy offspring. But throughout the land there is an invisible Freemasonry, a secret kingdom of the mystics of all religions, who know that Hindustan is one land and glimpse the evolutionary purpose in its association with Britain. No politician can escape from religion in India, and there is also no escaping the fact that the combined force of all the great religions of India believes in the permanent and profound value for the whole world of the Indo-British connexion. Christian mystics, Sufis, Yogis, and the illuminated lights of Zoroastrianism would say that they know rather than that they believe.

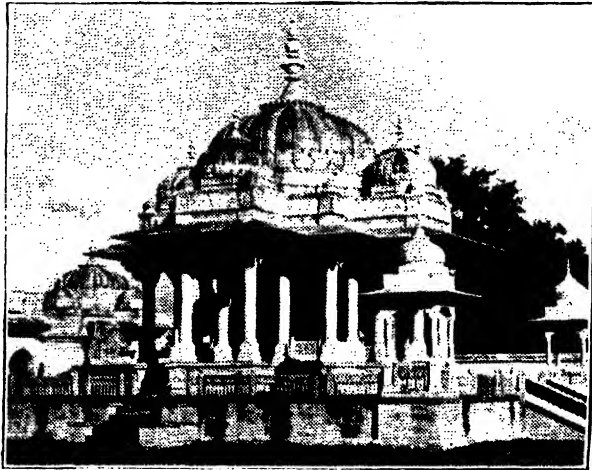
The Hindu holy man will tell you that the politicians shrieking for independence are doing good if inferior work in stirring a larger consciousness in the masses, and that actually they are powerless for evil against the unseen band of love between East and West that is being forged by Eastern saints engaged in solitary contemplation in forest glades and hill sanctuaries, and by the active work of Western Christianity.

Here is the voice of the authentic India, the one land in many; the words are those of a Hindu sage of Benares upon his death-bed a few years ago, "India needs love. The West has given her criticism these many years, therefore give the West love, till she learns to love this land of the sages. I am quite clear in what I am saying: love her and she will fulfil her destiny. The West still believes that knowledge will give her God; we think that God can be found by Bliss alone. A decade of intense loving will enable her to accomplish a century of God-realization. . . . Desire to convert the human into the Divine, the temporal

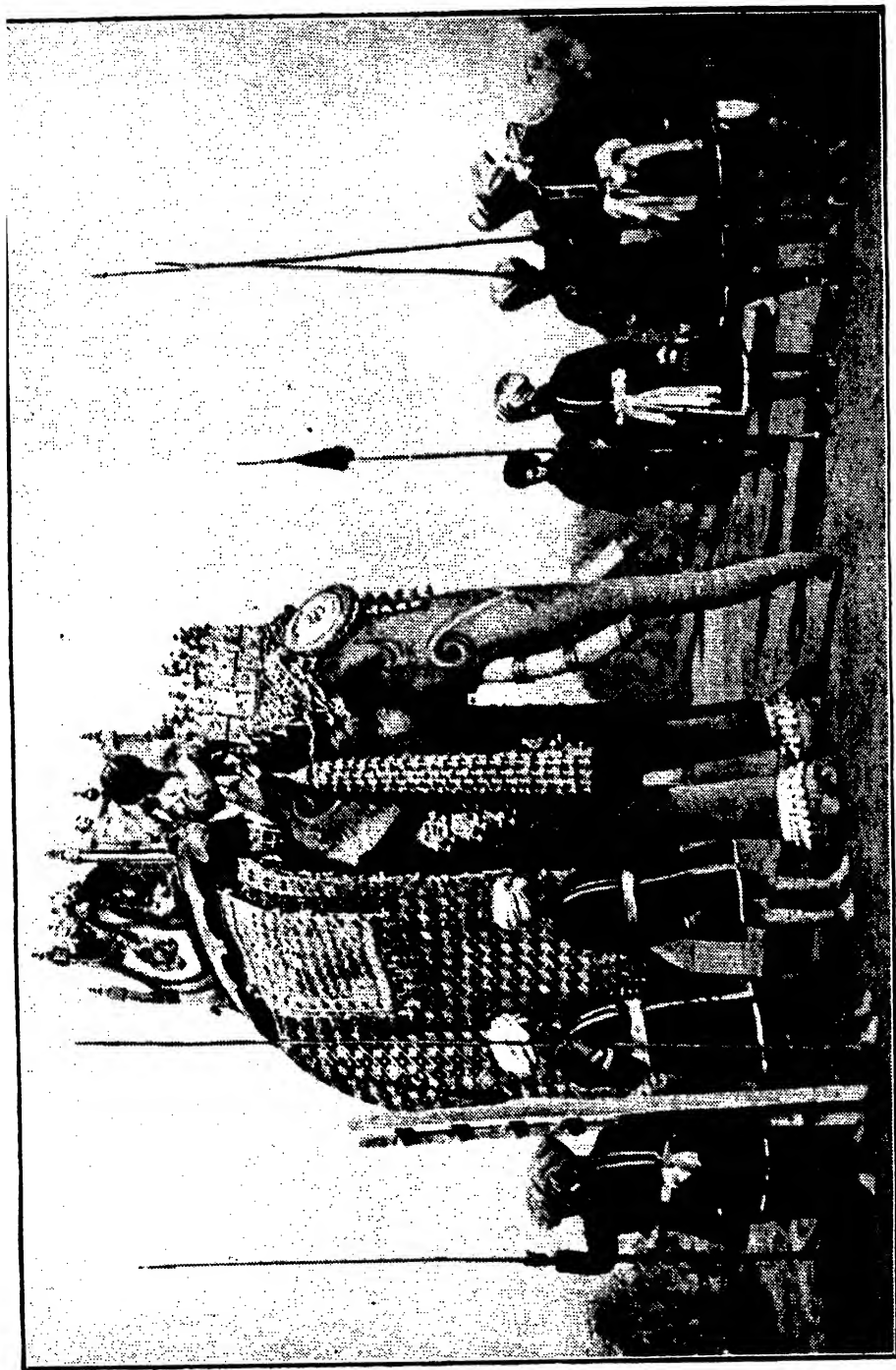
THE INDIAN PENINSULA

into the timeless, to convert all men not to one religion but to the essence of all religions." ("My Brother's Face," by Dhan Ghopal Mukerji.)

India is a land of contrasts. Not least is the contrast between the passing phase which has produced non-cooperation, and her highest thinking, which carries as far as thought can reach.



A Mausoleum at Jaipur.



The State elephant of the Maharajah of Patiala, Chancellor of the Chamber of Princes.

CHAPTER II

THE INDIAN STATES

By SIR WALTER R. LAWRENCE, Bt., G.C.I.E., G.C.V.O., C.B.

As the traveller passes from British India into an Indian State, at first he will notice no difference. The fields and the crops are the same, the villages look the same; but there is a difference, for the men carry arms and seem to bear themselves more proudly than their brothers on the other side of the boundary. It is on these boundaries, the scene of many disputes, that the truth may be learnt as to the merits of the Indian State and the British Province. The observer who can spend months in camp along the frontiers and can listen by the camp fire, when the smoke of the hookah goes in and the thoughts come out, may learn much. For night by night the villagers from the British side of the frontier come into camp to meet their tribal brothers who live under the rule of the Rajah. They do not call him Rajah; they speak of him by his name or refer to him as Durbar Sahib, for he is the Lord of Audience, and the Indian system begins and ends in that one word Durbar.

If the observer listens well and speaks little, the facts will come out; not the facts that have been prepared in answer to leading questions, but the simple facts rarely heard in the Law Courts, never wanting by the inspiring fire of the camp. He will hear—and this is everywhere the burden of conversation—of comparative prices, of the little economies which mean so much to the lowly ones of the East. It is cheaper in the Indian State. They, too, pay taxes, and get little in the way of roads and railways, school houses, and police stations. Irrigation is more primitive; life is less regulated; but life is happier and more Indian. British India is great, but Delhi is far. It is easy to walk to the Rajah's Palace, and to enter the Hall of Audience. But on the other side it is an expense, and a daring venture to approach the Sudder Station; worse still to travel to the provincial capital. The Rajah has few officials, and he knows them well; knows how far he can trust them. He also

knows his people, knows their *patois*, and knows what is passing in the villages by an intelligence system which has no counterpart in British India.

In British India the officials are many, and as legislation has its consequences the underlings of officialdom are in myriads. They are on small pay, and they "eat." The observer will hear of new legislation, new departments; but the people think only and uneasily of the new myrmidons, the new corrupt lictors, who will hungrily settle down on them. The conclusion of the matter is that on the British side there is regulation; over the border little regulation, but less daily tribulation, less worry, less "dikk"!

A traveller might almost walk from the cold snow mountains of Kashmir to the warm surf which beats on the cape which takes its name from the goddess Kumari without encountering a single police station or *octroi* post of British territory. He might start from Cape Comorin, and pass through the State of Travancore to the cooler lands of Mysore; through the great territory of Hyderabad; then through Central India and Rajputana into Patiala and Kashmir. There is much that is interesting in all these countries, so diverse from one another; but everywhere the system is the same; the outlook and ideals are the same. They are Indian, as the Moghul found and left them; and if the British ever leave India, and no foreign Power succeeds, British India will again become Indian.

Kashmir is a frontier State, with all the problems which attend life in a restless neighbourhood. The ruler is a Dogra Chief, head of the good fighters who live along the borders of the Punjab. The beauty of Kashmir's fair valley is described in Chapter X., but the Dogra country to the south has its qualities, and some think great mineral wealth. In Kashmir the ruler makes his stately progress in barges as picturesque as those of old Venice or old London. But at Jammu, his Dogra capital, he sallies forth on horse, and there are always elephants with their gorgeous trappings in waiting. At Srinagar in the summer, and at Jammu in the winter, the Halls of Audience are always open, and the Ruler knows the languages both of the Kashmiris and of the Dogras. They have always been shrewd, keen men, those Dogra Chiefs, and they are fond of touring in their territory and seeing things for themselves. They know, as do the other Chiefs of Indian States, that their system cannot last without the personal touch.

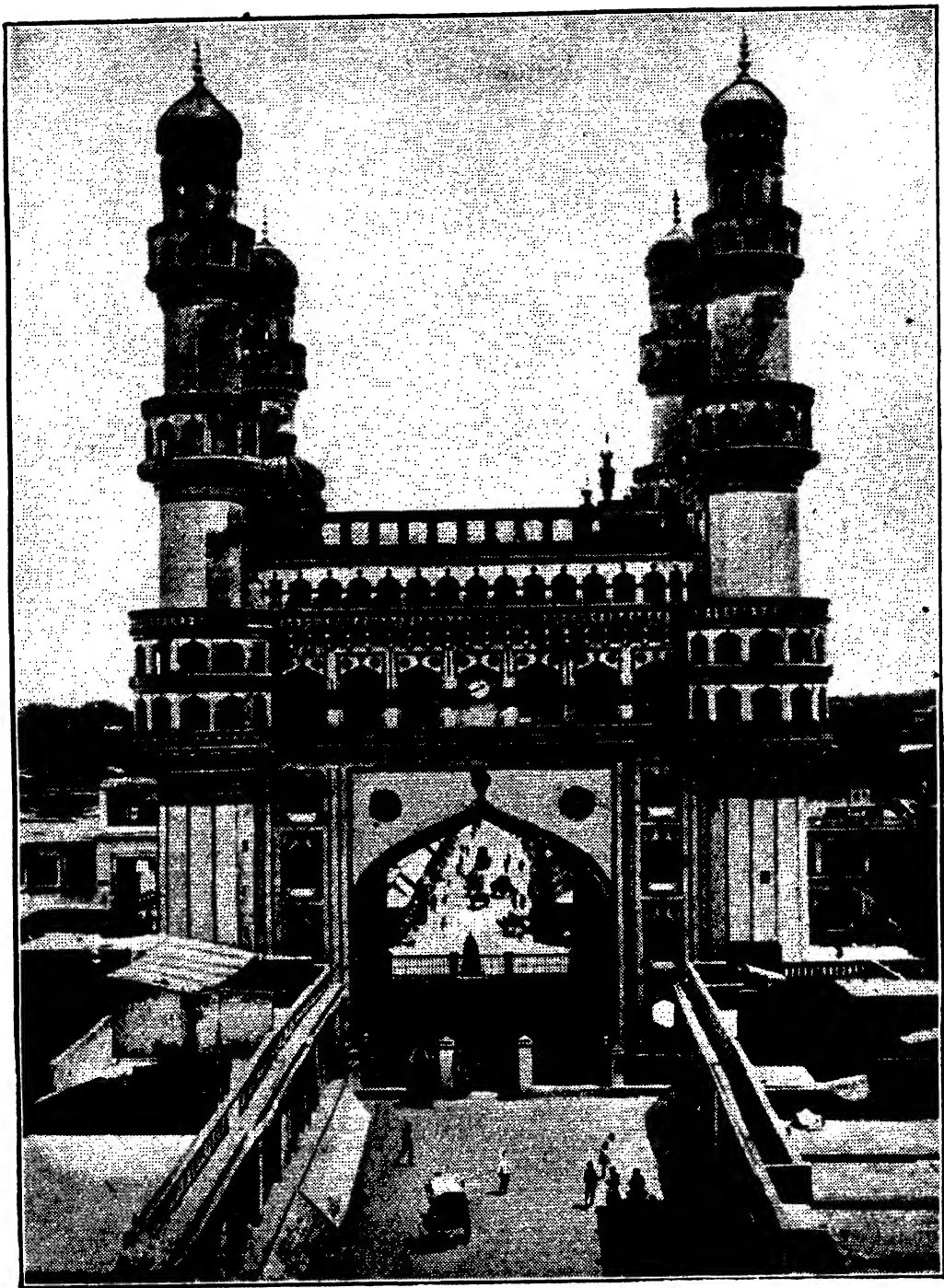
Through the lovely hill State of Chamba the traveller may reach the great Sikh State, where the Maharajah of Patiala holds sway—a rich

country of strong peasantry and fine soldiers. The Patiala House is of the great caste of the Punjab, and some maintain that the Jats and the Rajputs are of the same stock. But just as the Jats are now easily to be distinguished from the Dogras, so can they be distinguished from their neighbours, the Rajputs of Rajputana. All three are brave, independent, and proud: all have the same dignified ceremonials: all are to the manner born, with the old official titles which were in use in the Moghul days. But if the traveller passes on through the desert to Jodhpur or due south to Jaipur, that noble example of fine town-planning, and farther south, he will find among the dimpling mountains the beauty spot of India, exquisite Udaipur. In all these three States—and they are of equally high rank—he will see the real Rajasthan, where the “sons of Rajas,” the Rajputs, live lives of lofty and, as some pessimists think, lost ideals. But the age of chivalry has not passed in Rajputana, and none can come away from the Courts of the Rahtors, the Cuchwahas, and the Sesodias unmoved by and indifferent to the charm of this world of courtesy and noble self-respect.

The guide lingers in this land, though he knows that the long galleries running south are full of living tapestries and vivid frescoes which will never change; mountains and lonely rivers in deep canyons shaded by dark forests, where the tiger, bear, and panther take the waters, and the arrogant boar jostles them aside and drinks first. He lingers with reason, for Rajputana is the home of the real Hindu manners and fashion, and if, as many think, India's present discontents are social rather than political, the reformer will turn, like all Hindus, to Rajputana as the model. “It is done differently in Rajputana” has often settled a difficult social question in the Courts of other States.

Udaipur has a special quality. Hurdwar in British India is holy; Kashmir is holy, but its holiness is rather for the Sanskrit scholar, and the snake gods do not talk to the stranger. But in Udaipur there is a sense of ever-present and living holiness, for the chief is himself a high priest of a celebrated fane—he is the viceregent of the great god Siva. The people go about their daily avocations, but there is something different and distinguishing—seen in Rome, but missing in Jerusalem—the people of Udaipur almost seem to walk with their god.

In all the Rajput States there are legends of its chivalry, which is the soul of this proud race: the legends run on, and the bards are still busy with their chronicles—not published, but known to the Court and the country-side, a strong stimulus to fine conduct. One chronicle among so many which cluster round the story of Udaipur appeals to the



The Chár Minár, in the City of Hyderabad.

British. There is a little island on the lake with exquisite halls of white marble. This was the sanctuary of our country-women when they fled from the red-handed mutineers. They were safe in the noble keeping of the Maharana.

Now for the South, but before leaving the territory of Meywar reverence should be done to the towers of Chittor, where the Rajputs made the great stand, and the great sacrifice—the historic *Johur*. They would make it again, for the words “death before dishonour” are no mere phrase to them. At Chittor, as elsewhere, when resistance was of no avail, the men fell fighting, first giving their women to the flames, rather than to the foemen who thundered at the massive gates.

So to the States of Central India, to the rich lands of the Malwa plateau, where the soil is black and good. India has many beauties, not the least the loveliness of her various crops. The yellow blooms of the cotton delight the eye, but nothing matches the glory of the Malwa poppies of every hue. When the light breeze strokes so gently the poppies, colour holds high revel and the fields are like some silken carpet unfolded by the cunning merchant, who makes the purples chase the reds and the mauves. In this fertile land the Mahratta chiefs founded their kingdoms, the Holkars and the Scindias. The greatest of them, the Gackwars, hold sway in Baroda, which is off our route. Their land, too, is rich, and in the palace there is gold and silver and gems worth a king’s ransom, cannons of gold and silver and a praying-carpet of pearls made by a Hindu prince for the Moslem shrine in Mecca. They may not love one another, these Hindus and Moslems, but they both venerate the sacred places.

There is a world of difference between the Mahrattas and the Rajputs. The latter rule by instinct and tradition: the former govern, for it is their trade. The Rajput prince is *primus inter pares*; the Mahratta chief wants no peers, and has a keener eye for business and development than the rulers of Rajputana. The late Scindia was an administrator of the first rank, full of energy and action, and never flagged in his efforts to make his State prosperous and safe. He was a soldier, too, and, realizing that Gwalior was a key position standing across the most important route in India, he strove to make his army efficient. His great friend was a Rajput prince, who has shown that he also had the Mahratta genius for development; and perhaps the work of Maharajah Gunga Singh, who has changed the desert of Bikanir into a land of promise, will rank as high as the fine achievements of Scindia of Gwalior.

The traveller should visit Bhopal, where Moslem ladies have ruled wisely and well. There is much to be seen in Central India, ancient buildings, old customs, sharp contrast between Mahratta overlords and Rajput feudatories, and the wild Bheels of the forests, who know the ways of the tiger and love the heady drink which all can distil from the luscious flowers of the too generous Mohwa.

Now it is time to elude the police posts of British India, for a big wedge of regulation country must be crossed before the great State of the Deccans can be reached—the Moslem kingdom of his Exalted Highness the Nizam of Haidarabad. In India it is not difficult to travel for many months without encountering the pleasant habitations of mankind, tramping like the ascetics, skirting the villages, and shunning the roads. Their way lies through the jungle, where cultivation has never spread. They sleep on the lonely burning grounds.

The Nizam governs a State larger than a third of France. He is a Moslem; his subjects are mostly Hindus. It is a rich State, and the Nizam is reputed to have in his palace more than the wealth of the mines of Golconda, that desolate town so near to the leafy capital of the Deccan. Some of the old men, looking down from the hospitable Palace on the hill, can point to where the Pagoda trees stood. Their golden shower ceased when Berar, the country of cotton, was permanently leased to the British Government. But the roots of the golden tree may again send up its shoots.

Next Mysore, so full of history, when the British were doggedly fighting for a footing in the East, unconsciously destroying the balance and the old Constitutions of India. Lord Dalhousie finished the business in masterful fashion, and the British State in India was no longer one State among many, but became paramount and suzerain. The rendition of Mysore to its old Hindu rulers was a wise and generous gesture of the Suzerain. Mysore now has its Constitution. It has, too, a delightful climate, a fine river, harnessed for the working of the rich goldfields, and an exquisite waterfall, perhaps the most beautiful in the world. Some day the rapid traveller will find his highest aspirations gratified by a visit to the Taj Mahal, Udaipur, and the falls of Gersoppa in Mysore. What more perfect morning than coffee with the *Dame blanche* of Gersoppa, that fragrant coffee known as Mysore which mostly comes from Coorg, the one little province of India which fell to us without conquest.

And at the last through the States of Cochin and Travancore to the thunder of the surf of the great ocean racing to Cape Comorin. A very

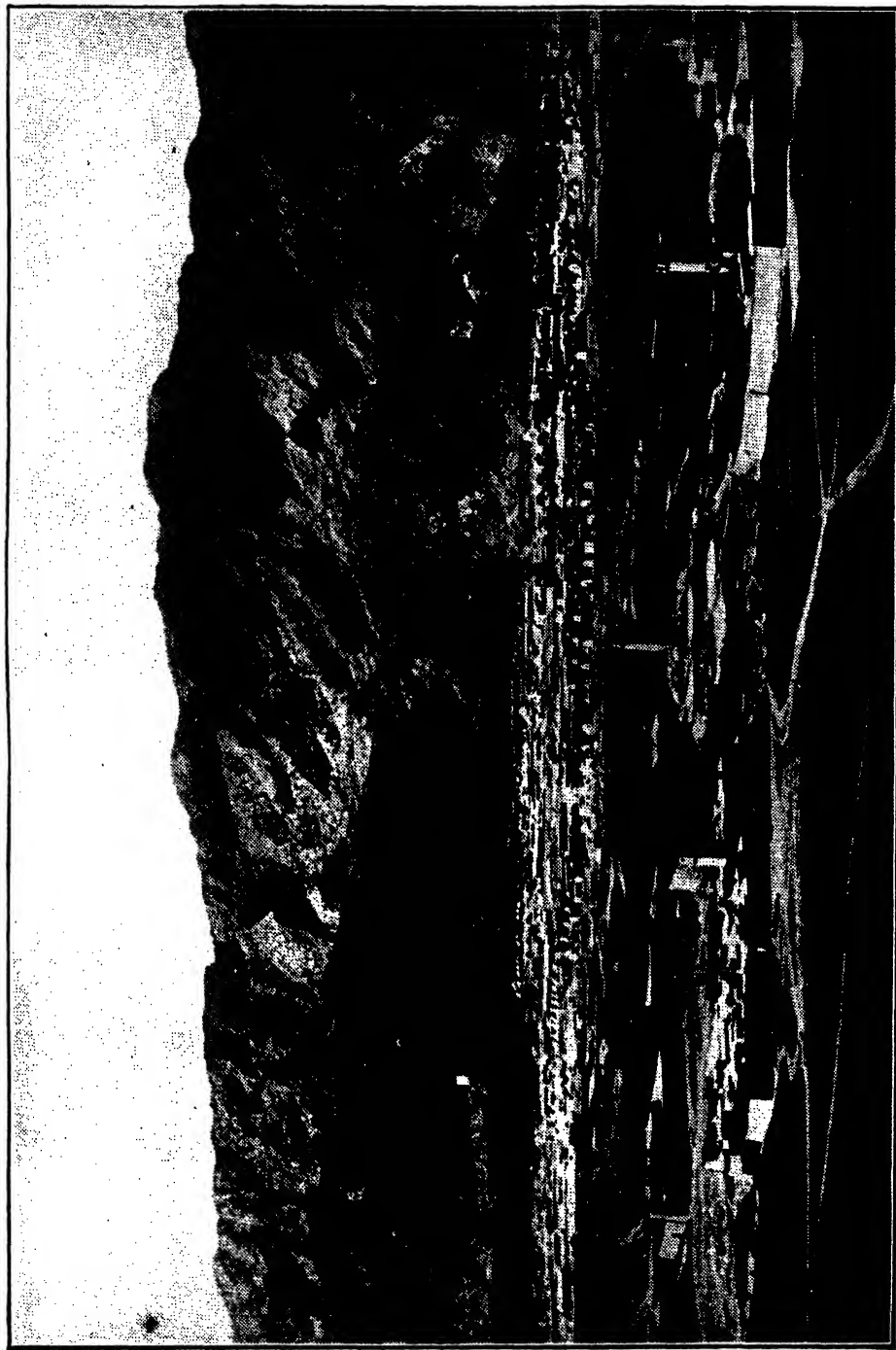
THE INDIAN PENINSULA

beautiful people in the beautiful setting of the Tropics. As the boat carries the traveller along the rivers and lagoons of this slumbrous and enchanted land he may well ask the old question, "Why should life all labour be?"

He may see in Cochin the ancient communities of the white Jews and the black Jews, but more interesting still is the fact that Travancore and Cochin proclaim to the world, what is true of all India, though elsewhere they tell it not from the housetops, that power and rule are through the woman. Alas! that in early days the British did not grasp this basic truth.



The river at Alleppey, Travancore.



The fort and encampment at Landi Kotal, near Peshawar.

CHAPTER III

THE NORTH-WEST FRONTIER

By J. COATMAN, C.I.E.

There is great interest, and more than a little significance, in the fact that the last of the many roads which lead to India—the air road—enters the country in the north-west. For the air port, Karachi, lies at the southernmost end of the thousand-mile border between British India and that belt of tribal country, of varying depths and degrees of independence, which separates her from Afghanistan and Persia. A glance at the map will show that from the north and north-west of Kashmir, that is, from Chitral and Gilgit in Central Asia down to the Arabian Sea, all the north-west of British India is flanked by mountain ranges with the Indus running roughly parallel to them from the spot where it enters our territory at Kirpilian, in the Hazara district of the North-West Frontier Province, until it reaches the sea near Karachi.

But the mountains are pierced at intervals by the Malakand, the Khyber, and the Bolan passes, not to mention lesser routes like those leading into India by the Kurram and Tochi valleys, and the well-known Gomal pass in Southern Waziristan—which from times immemorial have neutralized the protective potentialities of the high mountains and proved themselves no better than open gateways for wave after wave of invaders. Even for solitary travellers from China in the far east the gate of entry into India was in the north-west, for impassable forest and swamp and intransigent rivers forbade entry from the side of Burma and Assam. And soon, after an interval very brief and transient in comparison with the great age of the old north-western route, those who visit India will forsake the steamer routes to Bombay and Calcutta and come again by the north-west, travelling into the interior of the country by the equally ancient and hardly less famous road which leads to Delhi.

From the liners of the Imperial Airways Service to the Rig-Veda, almost the earliest and most archaic specimen of Aryan speech, is a far

cry, but the earliest of India's invaders of whom we have any certain knowledge also came by the north-west, as we read in that ancient document. It may be that the strange people whose settlements in Sind and the Western Punjab are now being examined by Sir John Marshall and his assistants came to India from Mesopotamia through Seistan and Baluchistan, but we cannot say at present. Therefore we must regard those Aryan invaders of 3,000 years ago as the pioneers of the route which we, their kinsmen from afar, are about to open again. Long after the movement of the Aryan settlers into India, but centuries before the recorded history of India begins, the kings of old Iran established their sovereignty—again by way of modern Afghanistan and the north-west—over the parts of India adjacent thereto, and, still later, Darius ruled over the lands afterwards conquered by Alexander. Fortunately Sir Aurel Stein has recently filled in great gaps in our knowledge of Alexander's itinerary and operations in Swat, and his latest book, "On Alexander's Track to the Indus," is so vivid and well-informed a narrative as to give the reader an almost uncanny feeling that he himself took part during some previous existence in those long-gone and once-forgotten battles.

The Malakand and its environs witnessed the march of the Greeks into the Punjab, and well into the Middle Ages of European history this pass remained a great high road between India and other parts of Asia. After Alexander's time the north-western passes from north to south of the great mountain barrier gave access to India to one horde of invaders after another—Scythians, White Huns, the Mohamedans of the first invasions from the tenth-century invasion of Sind onwards, the Moghuls, and, lastly, Nadir Shah in the mid-eighteenth century. At the end of that century the British reached Delhi, and from that time onwards the *Pax Britannica* has kept the frontier inviolate.

The mountain range which forms the administrative border of British India—that is, the border between the regularly administered and settled districts of British India and the belt of tribal country referred to above—has not always been an administrative and political border. The great Persian "king of kings" ruled on both sides of it, and so did the Mauryan, the Kushan, and the Gupta rulers of the earlier dynasties of India. But the decay of Moghul power in the outskirts of its empire left Rangit Singh and the Mirs of Sind with boundaries roughly coincident with those of our present administrative border.

In view of the circumstances in which the frontier, as we took it over from Rangit Singh and the Mirs, had become defined, it is not sur-

prising to find that it was an unscientific, haphazard affair, pregnant with innumerable problems, big and small, but most of them difficult. In some places the border divided tribes, both Pathan and Baluch, into two sections, the one governed and restrained by the British Administration of India, the other enjoying—or not enjoying, as the case might be—the licence of trans-border freedom tempered by the occasional aggressions of neighbours and enemies.

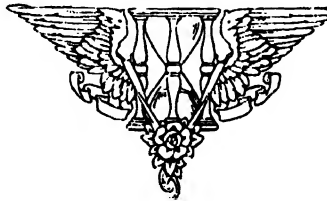
Naturally such an inchoate frontier was a source of much uneasiness to the severely practical minds of many of the early British administrators and soldiers whose work brought them into contact with it and its problems, and for years discussions concerning its ideal rectification provided much keen and, on the whole, harmless interest for strategists, both lay and professional. The more ardent spirits, those who belonged to what was once known as the “Forward” school, would have preferred to see at any rate the tribal belt between India and Afghanistan, and possibly the Kandahar province of the latter, brought under British rule so as to give the Indian Empire something with a reasonable claim to the title of a scientific frontier. The exponents of the “Close-border” school would have nothing to do with such ambitions. They wanted nothing better than to keep the existing frontier safe against attack from tribesmen, Afghans, and Russians, and to leave the tribesmen between themselves and Afghanistan and Persia absolutely alone, thus giving them no cause for fear and no excuse for aggression.

The history of such a region as the North-West Frontier of India could not possibly be any other than turbulent, and since the forties of last century, when the British took over both Sind and the Punjab, the frontier has witnessed a long succession of campaigns, expeditions, and blockades of varying degrees of difficulty and importance directed against nearly all the trans-border tribes, sometimes against single tribes, sometimes against coalitions of several. But Baluchistan and the Baluch tribes, thanks to the work of a frontier officer of genius, the late Sir Robert Sandeman, have presented very little of a problem for the past half-century. Strongly impressed as he was by the administrative inconveniences and even the injustices arising out of the scission of certain of the tribes, he took advantage of the first favourable opportunity to go into the Baluch trans-border himself and arrange with the tribes and their chiefs for the introduction of more workmanlike arrangements for tribal administration and for the future relations between the tribes and the Indian Government. He made good behaviour, peace, and progress on the part of the tribes the conditions

on which certain tangible material benefits would be conferred on them. He gave service in their own country to the tribesmen, and support to the chiefs in their troubles and difficulties.

Naturally, such an example was not lost on those responsible for the administration of the northern half of the North-Western Frontier, and Lord Curzon's great settlement of frontier policy after the upheaval of 1897 put as many of Sandeman's principles into operation as the different conditions of the Pathan tribes and country allowed. The unique conditions of the Great War with its aftermath, the Afghan War of 1919, broke down the Curzon system, particularly in the old storm-centre, Waziristan, and now a new and fruitful frontier policy is in operation—a policy of carrying civilization, by means of roads in Waziristan and a railway in the Khyber, to these long-vexed hills of unrest.

In 1894 the frontier between the trans-border country and Afghanistan and Persia was defined from far north to extreme south, and from time to time the administrative border between British India and tribal territory has been slightly rectified. The farther frontier is known as the Durand Line, from Sir Mortimer Durand, who carried through the negotiations with Afghanistan; and now the ultimate object of British policy on the North-West Frontier is to bring the hardy tribesmen on our side of the Durand Line to the same level of civilization as is to be found in India, to elevate them to the status of citizens, and to have the frontier for all time as the shield and buckler of India instead of her naked side. It is a worthy policy and must surely succeed.



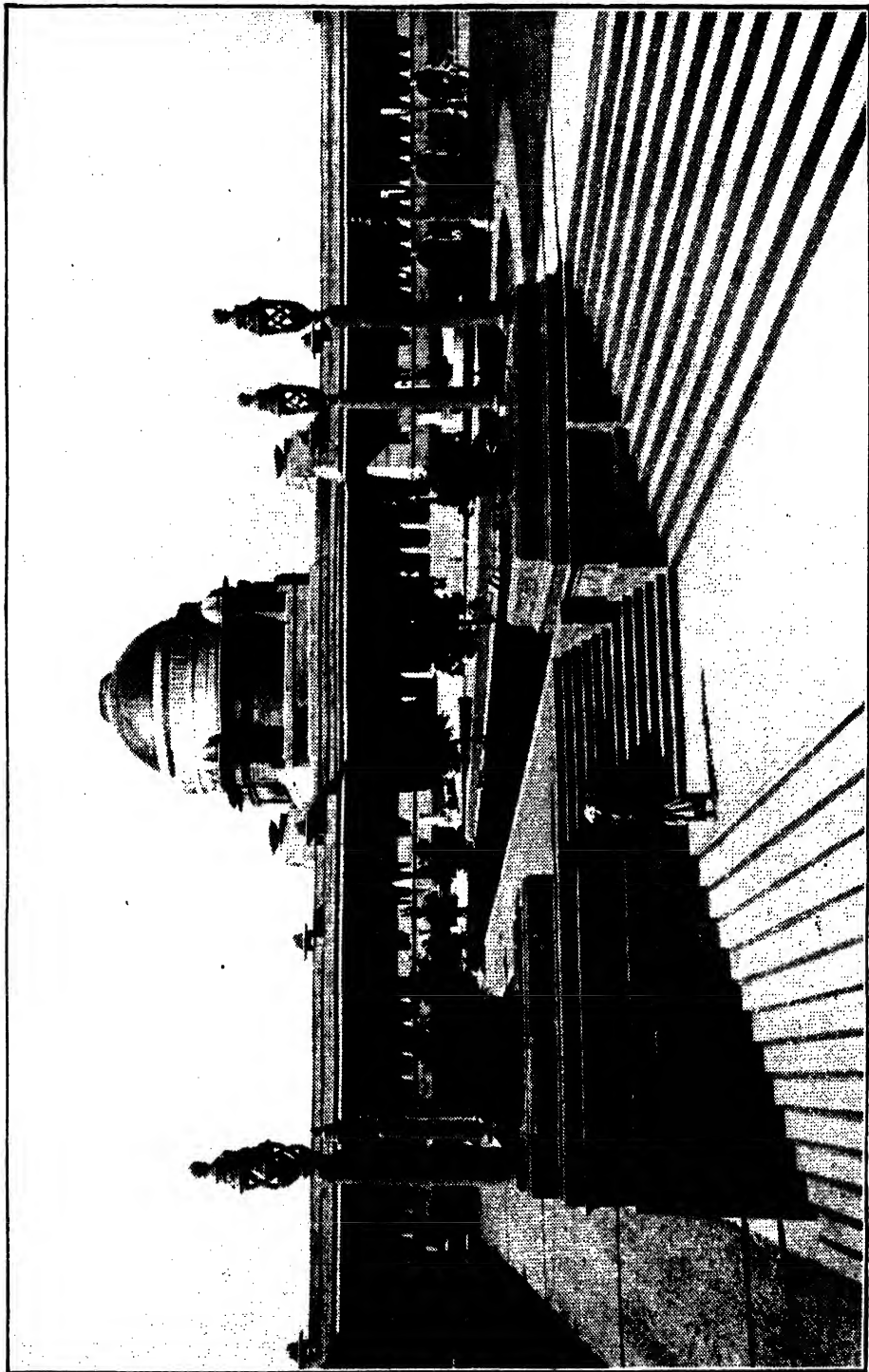
CHAPTER IV

DELHI, OLD AND NEW

Interaction between old and new cities is nothing new in Delhi. Every time a new capital has sprung up beside an old one something of the same sort has happened. Even the experience of seeing the Imperial capital growing up within a few miles of a decaying provincial town is not new. For when Shah Jahan built his new capital of Delhi-Shahjahanabad in the days of Charles I. of England, the latest of the older Delhis was decaying in close vicinity. And just as the people then saw the Court accommodate itself in the Mud Palace south of where the Jama Masjid now stands, while the new palace-fortress was building, so their descendants ten or twelve generations later saw the Viceroy and his officers, and the hordes of clerks that must accompany them, provided with temporary quarters in the northern outskirts while the New City was being prepared to receive them. It is characteristic of the change of times that the term applied in Delhi parlance (*Kila*—the fortress) to the palace of the Great Moghul is applied in New Delhi to-day not to the Viceroy's House but to the Secretariat. The sword has been beaten into the pen.

The Old City with its crowded slums lies to the north, some seven miles in circumference; the New City with its amply spaced buildings to the south, perhaps eleven or twelve miles along its perimeter. Taking the great Mosque as the centre of Old Delhi and the Secretariat as that of the New, the distance from centre to centre is not more than three miles as the crow flies—rather farther than from the Tower of London along the Thames bank to the Palace of Westminster.

The power of Shah Jehan's new city drew into it the life of the older cities, or what survived of them, until it became the one Delhi. Whatever the fate of the New Delhi of to-day may be, that is a result it can never achieve. In these days cities do not follow the Court, and New Delhi is not the seat of the Court for more than a third of the year. A question often asked is—Will New Delhi ever become a city? Not in



The Viceroy's House, New Delhi.

the sense in which the question is meant. It will be an annexe, an official suburb with a heterogeneous population drawn from all parts of India, but with a mere sprinkling of permanent residents. Only permanent residents can make a city, and New Delhi will not become one till it gets them. Almost half of what one may call the private residential area has been allotted to the Rulers of Indian States, none of whom is likely to spend more than a fortnight a year in Delhi. The great majority of them have not yet built at all. On the remainder of this area a certain number of private houses have been built, most of them not for permanent residence.

New Delhi owes its existence to the traditions of the historic tract between the Ridge and the river on which it stands. The town-planners have been careful to repay this debt by aligning the principal streets and avenues so as to give vistas ending in one or other of the great monuments of the past—the Jama Masjid, the tombs of Humayun and Safdar Jang, or the Old Fort—so that the new jewel has an old setting. Beyond that, and its central position in India, roughly equidistant from the three ports of Calcutta, Bombay, and Karachi, at the meeting point of four of the great railway systems, the Old Delhi has contributed little to the New. The rough grey granite of the local hills was too homely for the buildings of the new capital, just as it had been for the buildings of Shah Jehan. But in finding a substitute for it Lutyens and Baker followed the lead of Usta Hamid and his peers and chose the red sandstone of Agra so-called. And it is the free use of this splendid red stone in the public buildings of New Delhi which furnishes a colour harmony between the present capital and its latest predecessor.

But if New Delhi owes little to Old, beyond its existence and its central position, the reactions of the child on its parent have been much more varied, and not always for the good of the latter. Up to the present the accommodation provided for the thousands of clerks who have flocked to Delhi with the Government has been utterly inadequate. Houseless clerks and their families crowd into the old city and add to the congestion within the walls. A big scheme is under consideration for the housing of clerks, a measure of reparation from the new city that is overdue. Fortunately, public attention is now focused on the health problems of Delhi as it has never been before. Since the move of the capital in 1912 the infant mortality figures have shown a steady improvement. The figures for the three successive quinquennia in the period 1913-27 were 286, 243, and 204 per 1,000. Malaria in its seasons takes a heavy toll, and it is intended to make Delhi a malaria-free

enclave. Schemes for the improvement of the water supply, the distribution system, and the drainage have been approved and money provided or promised. The health problems of Delhi have become in a sense All-India problems. It is the cold-weather seat of the Legislature and of the Government of India, and Indians from all provinces collect there. It is in this that Old Delhi will find its greatest gain. Now that the needs of the new capital have been for the most part satisfied, more attention can be paid to its surroundings and to the task of making them cleaner and more healthy. An important project recently sanctioned is that for a 350-bed hospital outside the Delhi Gate of the old city, which will serve both Old and New Delhi. The present city hospital is always overcrowded, and half of it is underground.

With an improved standard of public health, Delhi will be able to take fuller advantage of the cultural opportunities that have come to her owing to her new position. In education the first gift it has conferred on her is the University, an institution which many think was called into existence too soon. Its scope has been restricted owing to lack of funds, and it would be difficult to say that it has yet had any marked cultural effect on the city. As regards the older culture, its exponents lament the decay of the historic language of the capital. The Urdu of Delhi, they tell you, has been corrupted by the influx of enterprising men from the Punjab, and the literary supremacy has definitely passed to Lucknow. What is really happening, perhaps, is that the old local culture is giving way to something wider, something more cosmopolitan, to meet the needs of the Indo-Anglican microcosm which Delhi has become. Elsewhere, too—in trade, in society, in costume—the same process is going on. The East may not change, but it has a great power of adapting itself.



CHAPTER V

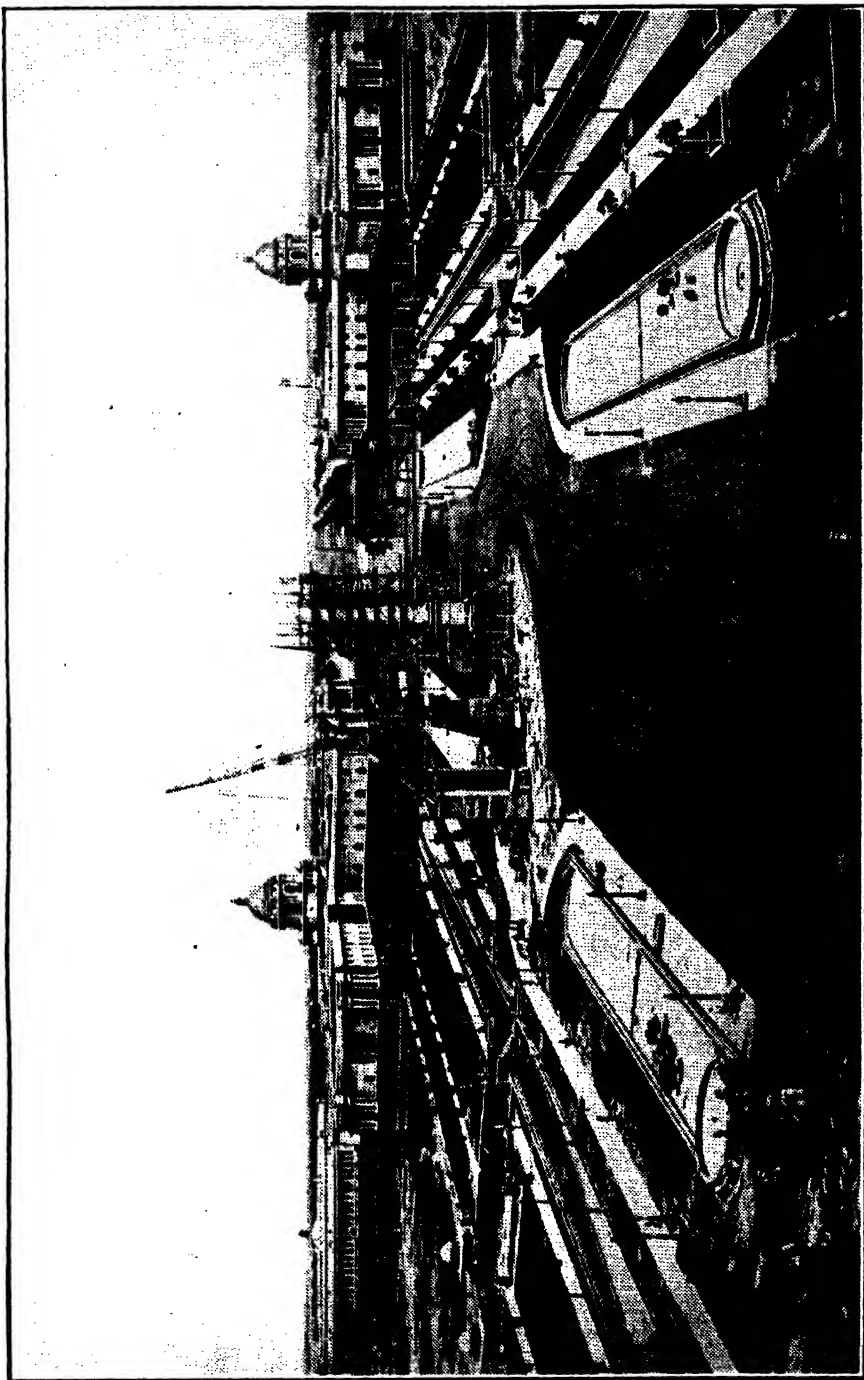
THE ARCHITECTURE OF NEW DELHI

By SIR HERBERT BAKER, A.R.A., F.R.I.B.A.

Few will now question the wisdom of the Commission of 1912 in its decision to abandon, in spite of local sentiment, the northern site of the British cantonments round the historic Ridge—a site proved to be limited in unoccupied, dry, and fever-free land—for the freer, wider, and healthier spaces to the south between the existing old walled city of Shah Jehan and the many deserted cities of the older Delhis. On the new site, two or three miles wide between the Jumna and the Ridge, were the brick-making pits and mounds of immemorial cities, a few unknown and long-forgotten graves, and ruined tombs and mosques of relative unimportance, while the historic tombs and ruined cities lie outside the proclaimed area. The land consists of deep alluvial soil with outcrops of quartzite rock near the Ridge.

The largest mass of rock was chosen as the focus of the city and its central buildings. In the winter of 1913 the writer was sitting with the present Prime Minister on this rock and wondering how a beautiful city could arise from what Lord Curzon described as “the deserted cities of dreary and disconsolate tombs” when the sun, setting beneath the rainclouds, formed a complete rainbow arching the destined central vista. The good omen then acclaimed has been triumphantly fulfilled, as the building of the city proceeded—in spite of the evil prophecies of the unluckiness of Delhi—without a break through the dark days of the War and the economic stringency which followed it.

From this focus lead two great roads: one, the Processional Way or Maidan, with its lawns, avenues, and fountains, points to Indrapat, the fortified city of the legendary Indraprastha of the Mahabharata and the citadel of the Moghul Emperor Humayun. At an angle of sixty degrees with this another road centres on the dome and minarets of



A panoramic view of New Delhi taken from the Viceroy's House.

the Jama Masjid, the great mosque of Old Delhi. These two roads gave the geometrical key of the ingenious plan of the new city, a noble development of the germ of L'Enfant's plan of Washington and Wren's rejected design for the City of London.

Twenty feet of the rock, that was 50ft. high in all, had to be blasted away and filled into the depressions in order that a 30ft. platform might be formed with a red-stone wall built round it, comparable to the great platform base of Persepolis, on which Darius lifted up the privileged royal enclosure in enjoyment of the view and air above the city below. On this are placed the central buildings, the Secretariat in two detached blocks, and Viceroy's House. The outer walls of the Secretariat, the two blocks of which are 150 yards apart, rise sheer from the platform wall. Broad flights of steps on either side lead up to the level of its porticoes, propylæa, as it were, to the whole group of buildings. Below, enclosed by high pierced stone railings like those of the Buddhist shrines of India, is the Great Place, where cross-roads meet. From this the Processional Way leads up between the steps to the court which separates the Secretariats. In the centre are crossway fountains which reflect the two domes. Grass lawns, orange trees, and flowers will temper the heat and the glare of the hot red-stone walls and pavements. Here will be placed four monolith columns of red stone, crowned by a bronze ship as the symbol of the Empire of the Sea, on the model of the inscribed columns which the Emperor Asoka set up in India. They are given by the four Dominions of Canada, Australia, South Africa, and New Zealand to symbolize "the common loyalty of the Empire to the Person and Throne of His Majesty the King-Emperor."

The Processional Way leads on through high railings, between fountains and trees, to the privileged Viceroy's Court; in its centre stands a column of great height given by the late Maharajah of Jaipur, terminating in the Star of India rising from a lotus-flower. Beneath it will be the statue of the father of New Delhi, Lord Hardinge. At the end stands the majestic building of Viceroy's House. The great steps and raised-columned portico of the state entrance, flanked with statues of their Majesties, face and command the view eastwards, past the column, through a double row of columned porticoes and the two domes of the Secretariat, down to the far avenues and water channels of the Maidan, to a vast arch, the War Memorial of the Indian Armies, and to the gate-turrets of Indrapat and the distant Jumna. North and south of Viceroy's House are other wide Maidans and avenues. Behind to the west lies the private garden of the Viceroy, Moghul and intricate,

with innumerable flower beds and water channels like the pleasure dome of Kubla Khan,

Bright with many a sinuous rill, where blossomed many an incense breathing tree.

From the garden the park stretches to the Ridge, where it was designed to quarry out and build up a semicircular amphitheatre half a mile in diameter in place of the distant and earth-built amphitheatres of the famed Delhi Durbars. This conception for pageantry, which might be unrivalled in any ancient or modern city, has yet to be achieved.

The position of the Secretariat building on the same exalted platform as Viceroy's House above the level of the rest of the city has provoked the criticism that the home of the Viceroy would have better expressed the supreme authority of the Lord Sahib had it stood aloft and aloof from that of the offices of his Government. This criticism raises interesting problems of the ideals and the expression of governance. Lord Hardinge and his Government had a high, and in view of the reforms even a prophetic, instinct when they decided to express in terms of architecture the common dignity and distinction of the Government of India as a whole. Governments, as individuals, may indeed rise to the distinction given to their office. The creation of such influences should be a high mission of architecture; and the founders and designers of New Delhi, if this faith prove to be justified, cannot by future generations be "taxed with vain expense" or "ill-matched aims" in giving this distinction to the home of the Government of India.

The state entrance to Viceroy's House, under the great columns of its portico, leads into the domed Durbar Hall, the centre of the house and the support of the external dome, which dominates the city. Beyond its surrounding marble-lined corridors are grouped the principal reception rooms. Two great staircases lead down to the ground-floor level, where carriageways right through the building connect to many entrances and spacious cloak rooms, which will make it possible to speed both the coming and the parting guests. There are four wings, for the Viceroy, guests, staff and offices. The house has suffered the mutually conflicting criticism of being too small in its room-space and too large in its mass, but it is often forgotten that spacious corridors and loggias have during great receptions the value of rooms in an Indian climate and that the capacity for inviting great numbers at one time tends to convenience, comfort, and economy.

The Secretariat's three-storeyed buildings give accommodation to

all the administrative departments of the Government of India. The rooms allocated to Ministers and Committees have the distinction of a columned loggia 50ft. above the ground level of the city. In addition to the innumerable offices, there are, in the North Block, a high-domed entrance hall lit by carved and pierced stone screens and, in the South, a conference room surrounded by libraries and reception rooms where the Government of India can itself entertain. Below, between the platform wall and the rock, are the record and storage rooms. On the front of the high wall at the level of the Great Place facing down the water-channels of the Maidan are red-stone vaulted chambers enshrining the foundation-stones laid by their Majesties in 1911. Above them are the Royal Insignia, their Majesties' Coats of Arms, and dedicatory inscriptions inlaid in white marble on the red stone. From these chambers spring the small fountains which feed the larger fountains and water-channels which run for over a mile down the central avenue.

The criticism that the site of the Council House is inferior to that of the Secretariat on the "Acropolis" may have justification. But this building was the offspring of the new Constitution-created under the Act of 1919 after the foundations of the Secretariat were built. There was no room for it then on the platform, but it was placed on a site of distinction and near to the Secretariat for the convenience of the Ministers and secretaries who are members of the Legislature. There are three chambers—the Legislative Assembly, the Council of State, and the Council of Princes. The building is circular, as fitting its site, an equilateral triangle. The three chambers are built at equal angles round a central dome, 90ft. in diameter, used commonly as a library, but in it on special occasions the Viceroy can assemble all three chambers. The central dome will thus express the essential unity of the three estates of all India. Three open courts with flowers and fountains separate the three chambers. On account of their semicircular form, and the height and spaciousness necessary for dignity and coolness, the chambers presented exceptional acoustic difficulties. But by means of straight-faceted and sloping panelling on the walls and sound-absorbing plaster on the ceilings these difficulties have been overcome.

There are, besides record offices, part of four blocks of buildings which will contain museums and libraries, built at the cross-road in the centre of the Maidan; churches, bungalows great and small, from the houses of the Ministers and officers to the streets and courts for clerks and menials; post and police offices, schools, hospitals, hostels for members of Parliament, bazaars, and shopping centres. Avenues of

trees, already shade-giving, line the streets. All living temples and shrines are enclosed with walled gardens. Among them the famous Sikh shrine has a specially honoured enclosure near Viceroy's House. The last of the Sikh Gurus who lies buried here, when condemned to death by the Emperor Aurangzeb, went to it with a prophecy on his lips that a great white race would come from the West to destroy the Empire of his executioner. The roads, public gardens and parks, except those of Royal or local significance, are named after great men and women of Indian history. Next to the names of Clive and Hastings are those of Dupleix and Albuquerque.

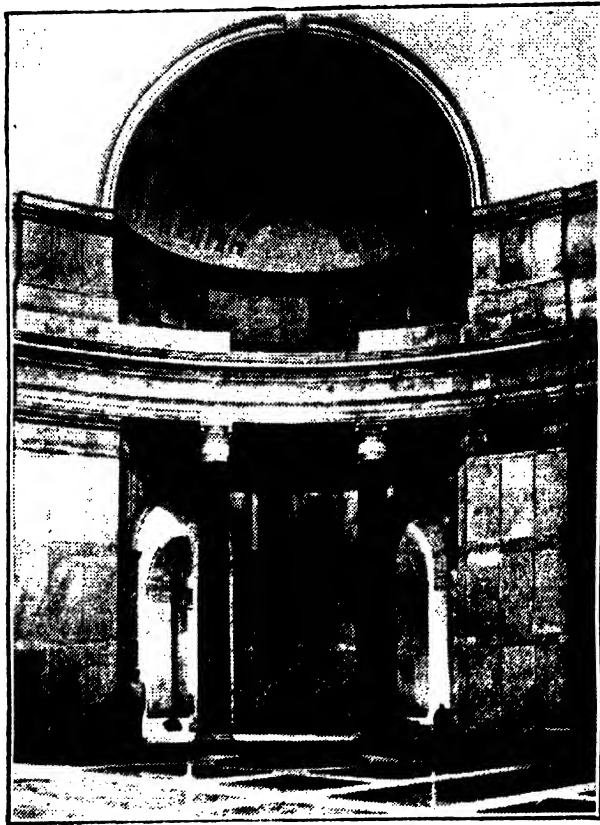
The principle underlying the designs of the architects has been to weave into the fabric of the more elemental and universal forms of architecture the threads of such Indian traditional shapes and features as were compatible with the nature and use of the buildings. The more characteristic of these features are the *chajja*, a cornice of stone slabs overhanging the walls to a depth of eight or nine feet like the wood and tiled eaves of Spanish and Italian buildings; the *jadli*, carved or pierced stone or marble slabs of intricate patterns for windows, screens, and balustrades; the *chattri*, or open canopied turret, a symbol of royalty; and the high arched and domed porches which distinguish Moghul buildings. A bold departure in Indian buildings is the omission of continuous verandas, but the trust in the thick or hollow walls, wide cornices, deep-recessed windows and external shutters for the cooler season for which the buildings were originally designed has not been misplaced. The extreme heat of the summer for those who do not migrate to Simla has been successfully mitigated by machinery which cools the summer and warms the winter air.

The work, except for a handful of British foremen (the salt of the job, and men proud of the good work done by their Indian fellow-workmen), has been executed entirely by Indian workmen. In the stoneyard, where some two or three thousand masons have been at work for fifteen years, the murmurs of the saw have never ceased by day nor by night. In the joinery and furniture shops, where the furniture of Viceroy's House has been made, Indians, mostly Sikhs, soon overtook and displaced the expert Chinese craftsmen, who had been held pre-eminent in the more skilled trades. India is thus the richer by many skilled craftsmen who are now returning to their homes.

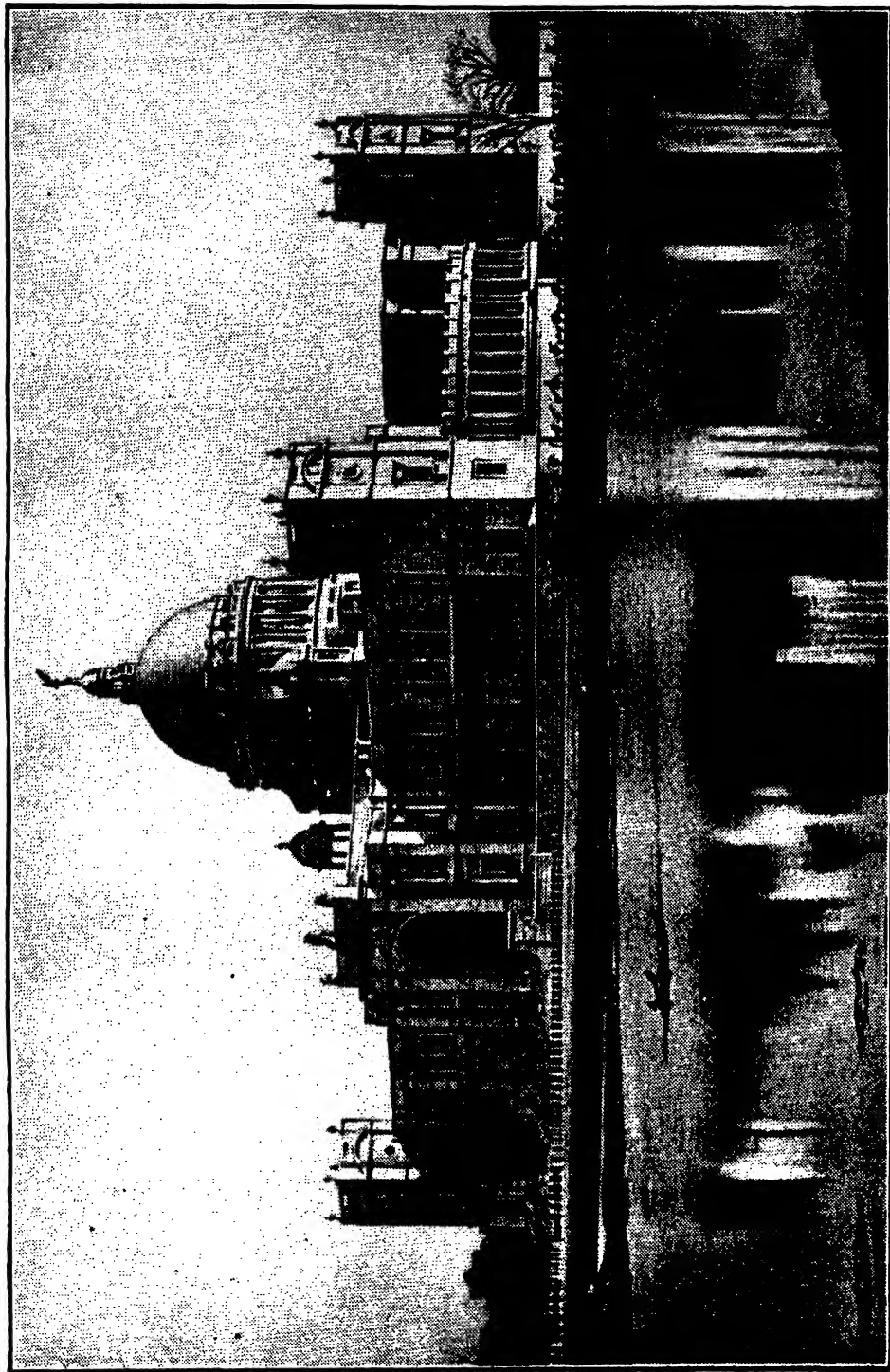
The Indian people are good sightseers, and the gaily-dressed crowds who will come in increasing numbers to see the new as well as the old Delhi should grasp the meaning to be read in the stone and marble of

THE INDIAN PENINSULA

their capital. But the success of Delhi as a pleasant and beautiful city will depend on the Government and the votes of the Legislature for full and clean maintenance of the avenues, lawns, gardens, and fountains both in the new city and in the surrounding circle of older Delhi. If this duty is liberally accepted and performed, the new capital of India, with the red and white buildings of its Delhis new and old in their setting of trees and gardens, may become the pride of India and afford to future generations justification for the faith, courage, and foresight of its founders.



The Durbar Hall, Viceroys House.



The Victoria Memorial, Calcutta.

CHAPTER VI

CALCUTTA

Standing on a huge cake of Ganges mud with no certain foundation, raised but a few feet above the level of the Hooghly, one of the greater mouths of the Ganges, Calcutta is a triumph of British perseverance and grit. Perhaps no other people would have chosen this particular site, where a few scattered villages maintained precarious life in the jungle, for the creation of one of the big cities of the Empire. The original lure was the river, a broad outlet to the sea, with its chances of trade in the richest province of India. Job Charnock having made his choice, there the British settled, and there they have evolved the most characteristically Western of all Eastern cities—a city solid in its architecture, nobly planned, with outward evidence of its wealth; a great centre of trade and commerce, and not less a centre of culture.

Panegyrists have described Calcutta as “the London of the East,” the “second city of the Empire,” “a city of palaces.” There is some truth and some exaggeration in all these phrases. Including Howrah, the industrial area on the other bank of the river, Calcutta has a population of 1,300,000 souls. So far as European inhabitants are concerned it is the first city in India. For long the capital and the cold-weather seat of the Viceroy, it retains the amenities of a capital city, and the residential quarter of the Europeans and richer Indians speaks of a time when questions of space were less important than now.

The “palaces” of Chowringhee have mostly disappeared, their sites covered by commercial buildings, by clubs, or by the great blocks of flats which are springing up rapidly in days when the cost of living no longer permits the keeping of an army of servants; but the setting of this principal glory of Calcutta along the edge of the Maidan—most wonderful of open spaces—is still a thing of beauty. Calcutta is like London in that it is a great port, and that in these days the increasing number of its docks tends to carry trade farther down the river and away from the centre of the city. Though no longer the capital of India

it is the capital of Bengal, the seat of a Governor, the possessor of a great university, of the Imperial Museum and the Imperial Library, and, perhaps not least, of the Victoria Memorial, the most ambitious addition to the architecture of India made in the present century.

The eminence of Calcutta in commerce derives from several causes. Through its port passes the external trade of an area with a population of 100,000,000, and agriculturally the richest area in India. Bengal has a monopoly of the jute trade. The great mills, dwarfing the largest conception of Lancashire, extend for forty miles along the banks of the Hooghly, and many of their tall chimneys are visible from the water-side. They give employment to 250,000 operatives, and Bengal grows all the jute that these handle and exports a large surplus of the raw material to America, Germany, and Scotland. Tea in vast quantities from the gardens of Darjeeling and of Assam is yearly carried from Calcutta. In these days the coal of Bihar, the most productive mineral area of India, is shipped from Calcutta, and its trade in hides and skins is enormous. These are the principal exports, but there are few of the products of India and few classes of imports that are not handled in the docks or the wharves which line the river right to the centre of the city. All this trade is controlled by the Commissioners for the Port of Calcutta, whose revenue derived from dues was nearly £2,500,000 in 1928-29. Vessels entering the port totalled 8,000,000 gross tons in 1928-29, and, while the total imports of goods were nearly 4,000,000 tons, the exports were 7,000,000 tons.

Calcutta's trade has in volume already surpassed the pre-War totals, and at the end of 1928 the Viceroy, Lord Irwin, opened the new King George's Dock, through which ultimately a great part of the trade of the port must pass. At present there are in the docks and jetties berths for forty-five vessels, with four dry docks, and river moorings for sixty-two ocean-going ships. The development of this new system has robbed the Hooghly of the picturesqueness it possessed when all but a narrow channel in front of Fort William was thronged with every type of ship that the East could show, but it has added vastly to efficiency and has placed Calcutta among the most practically equipped of the great ports of the world, with all modern machinery for the handling of cargo quickly and cheaply.

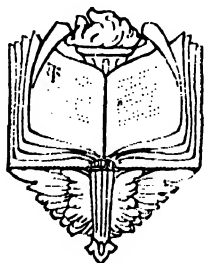
Lord Curzon's deep love for the city was shown in his creation of the Victoria Memorial, a marble palace about which architectural opinion may differ, but which remains a very splendid addition to the beauties of the town; he was also responsible for the creation of the Calcutta

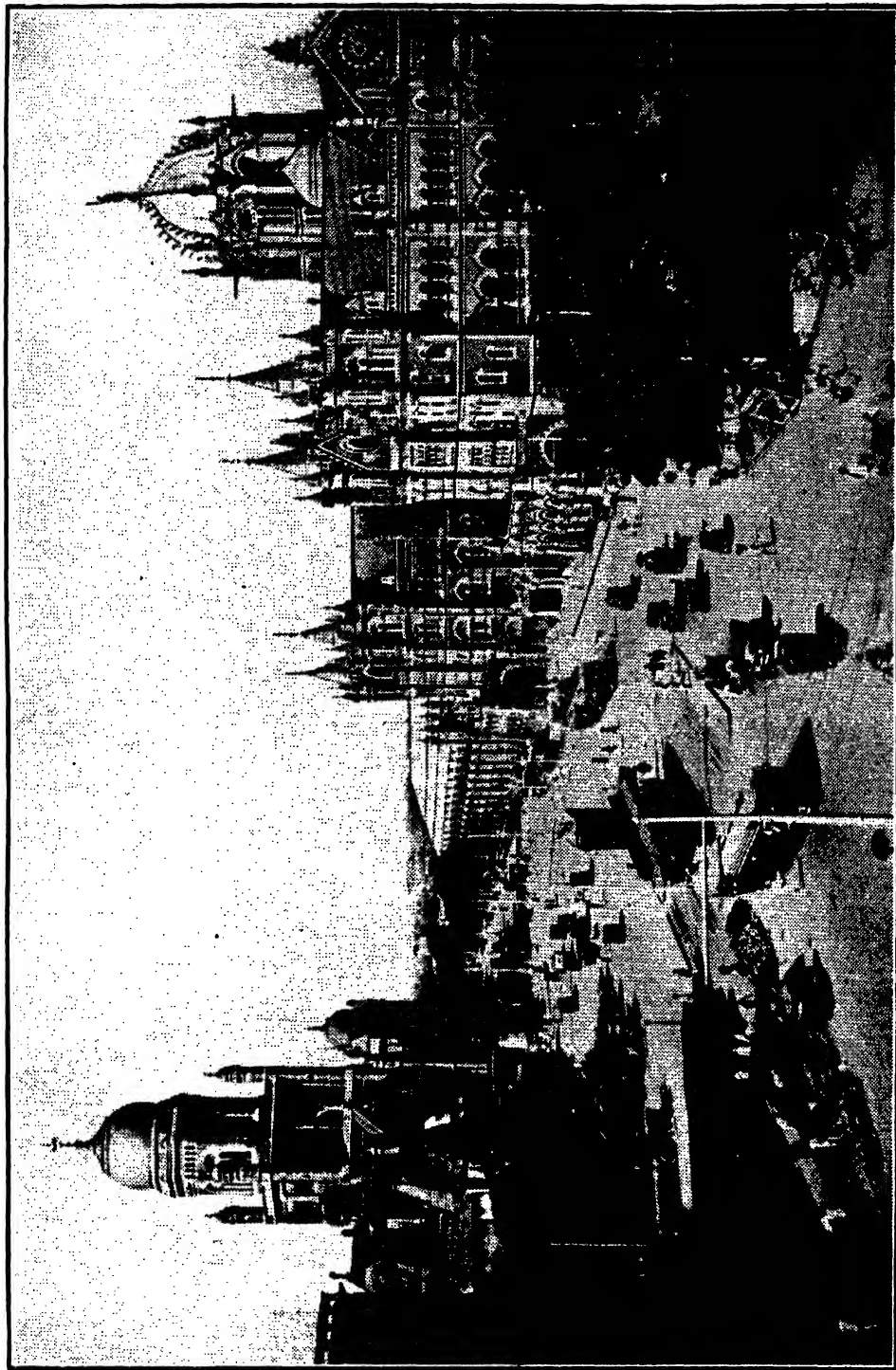
Improvement Trust, whose labours are having great results in the transformation of the older, more densely crowded areas of the city.

With capital expenditure of over £8,000,000—a sum that grows from year to year—the Improvement Trust has already accomplished much. Calcutta is expanding outwardly until its farther suburbs are seven miles from its centre, and in the centre itself great avenues have been cut through despicable streets and broken-down dwellings. Re-housing goes side by side with improvement, and in a few more years the scandal that moved Lord Curzon's indignation will have disappeared.

Private enterprise has done almost as much as the Improvement Trust to give a new aspect to Calcutta. In and around Clive-street—the Lombard-street of the East—nearly all the banks and great business houses have rebuilt their premises in styles which have borrowed largely from the architecture of the great commercial cities of the West. Their spirit of confident optimism is reflected in the European trading quarter of the town, where splendid shops rapidly spring up. It is the same in the residential areas. The European no longer lives in a sort of proud isolation. Rich Indians increasingly invade the European quarter and outdo the merchant princes in the splendour of their dwellings.

The city still feels hurt in its pride that it should have ceased to be the capital—it holds itself worthy of that distinction—but it is realized that if, under the new conditions, Calcutta had remained the capital, it would have been as necessary to build a new city as it has been at Delhi. Nevertheless, in its new aspects Calcutta is to-day a city of which the Empire may be proud.





The Municipal Offices and the Victoria terminus of the G.I.P. Railway, Bombay.

CHAPTER VII

BOMBAY

The transition of Bombay from a small Portuguese settlement and a collection of fishing villages to a great city has been distinguished by much that is remarkable. The period covered is more than two-and-a-half centuries; and the making of one island out of seven islands, first contemplated by far-seeing men within a few years of the British occupation being effected, has been spasmodically continued throughout that time.

The history of Bombay is therefore primarily one of continued struggle against the sea. It has been a struggle without parallel in the history of the Empire, and many of the men who played the noblest part in it, like Governor Aungier in the seventeenth century, are, by the irony of fate, scarcely remembered to-day among the builders of Empire. Nor was it only with the sea that the early makers of Bombay had to contend. The climate, to which their manner of life was ill suited, and tropical diseases with which they could not contend, killed thousands of men who deserved a better fate. Added to this were the constant menace and frequent reality of war with the Mahrattas and the French, and of invasion by the Moghul's sea forces and by pirates.

As one looks down on the city and its docks and harbour, either from Malabar hill or Bhandarwada hill, it is difficult to realize the physical changes that have been brought about in the island. Scarcely any of the hills depicted in the old engravings of Bombay survive, for they have been levelled, mainly to fill in the low ground rescued from the sea by such engineering achievements as the Vellard, which closed "the great breach" through which the sea flowed right up to the heart of the modern city.

Yet in several distinctive ways certain periods in the history of the city are indelibly marked upon its face. The low-lying land in the north of the island and on the Tardeo flats, where the racecourse is situated, are reminders of the slow progress of reclamation when once the sea had been shut out. Similarly, though it is seventy years or so since

Sir Bartle Frere's régime, when the walls of the Fort were levelled, one can easily trace the way in which the city grew beyond the limit of those walls across the wide belt of country which for military reasons was kept clear of buildings from the middle of the eighteenth century. There are, however, few old buildings to recall the antiquity of the city; the scanty remains of Bombay Castle and the Cathedral are the chief of its ancient monuments. The Town Hall, the old Government House at Parell (now converted into a Government laboratory), the Byculla Club, and a few scattered bungalows in Mazagon recall the spacious days of men like Mountstuart Elphinstone and Sir John Malcolm.

The havoc wrought by the plague in 1897 and many years afterwards in the crowded and insanitary buildings occupied by the poor, led to the formation of the Improvement Trust and to the clearing away of some of the worst slums and the driving of arterial roads through the city. Later schemes have provided for the building of great blocks of workmen's dwellings, the development of the suburbs, and the reclamation—which is still unfinished—of a part of Back Bay.

The great port of Bombay, with its miles of docks and railway, is by far the most considerable port in India, judging by the tonnage of ships using it during 1927-28, when also the trade of the port aggregated 251 crores of rupees in value. The main industry on which the port and, indeed, the whole city of Bombay rely for their prosperity is that of the cotton mills. There are to-day about 74,000 looms and 3,468,000 spindles in Bombay Island.

If Bombay is proud of its port it is equally proud of two other institutions which have a long and honourable history—its University and its Municipality. One of the three oldest universities in India, the Bombay University has played a conspicuous part in the educational history of the country. Similarly, the Municipality has been one of the pioneers in the development of local self-government in India; it has done its work with efficiency; and it has helped to promote that feeling of good citizenship and of good fellowship which, except at rare intervals, has long distinguished Bombay. It is a city in which almost every race in the East is represented, and in that strange diversity of creed and language, of tradition and ideals, there has, as a rule, been marked concord. *Ecce quam bonum*, and in a city, too, which, excluding suburbs, has a population of 1,175,914. Nor can one conclude even the briefest survey of Bombay without remarking that it is a cheerful giver. For philanthropic and charitable effort it has a record that any city in the world may well envy.

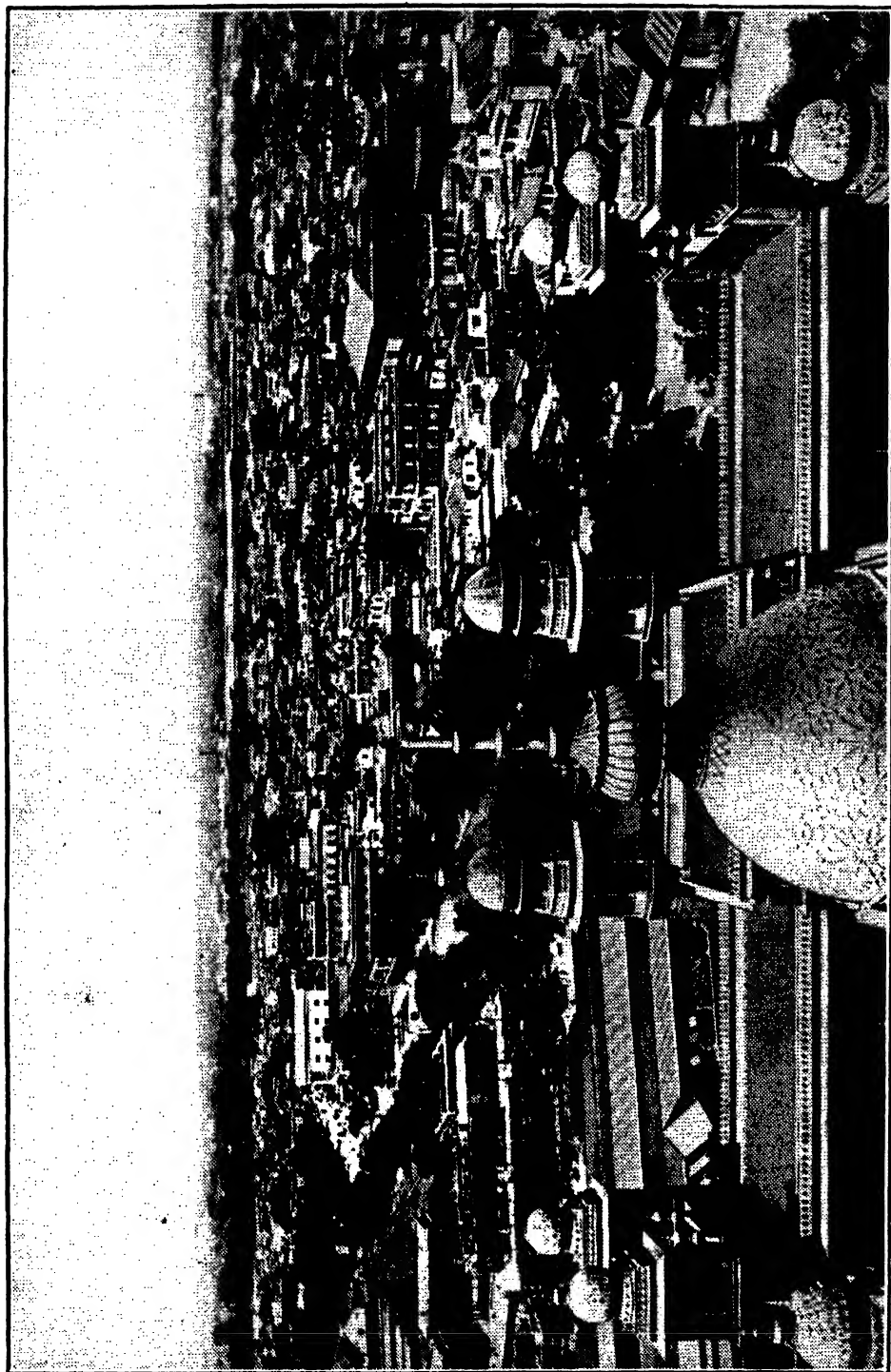
CHAPTER VIII

THE CITY OF MADRAS

Madras resembles an old English provincial town, with its aloofness from the main currents of national life; yet Madras is perhaps the most politically important town in India. Her sons are among the leaders of political, social, professional, and scientific activities in India and are everywhere in high place in the Central Government, commerce, and journalism.

Most of the people of the Presidency depend on agriculture for their prosperity. When Francis Day chose Madraspatam as the site for a new trading settlement in 1639 he was attracted by its situation at the natural outlet from the fertile plains that lie behind it. Trade in the produce of the country was then his purpose: it is still the main pre-occupation of the city. Of Day's original building little more than the site remains, for Fort St. George has passed through four phases of development, the first being Cogan and Day's castle; the second, the quadrangular bastioned enclosure of the White town, which converted the original castle into a citadel; the third, the development of the walled town into a fortress planned as a half-decagon; and the fourth, the entire reconstruction of the Fort as a half-octagon on Vauban's system with ample outworks.

To-day the Fort presents outwardly an appearance little different from that of 1783, but its internal arrangements have undergone many changes. A new Council Chamber has been built and the Secretariat added, and many of the barrack buildings have been remodelled. Nevertheless, the student will find many traces of the old Company days in the Fort. The kernel of the Secretariat is still, authorities affirm, the old Fort House built in 1694-95; the Officers' Mess once served as the Exchange and was built for that purpose about 1790. Near by is St. Mary's Church, the oldest structure in the Fort and the mother church of the Anglican Church in India. The foundation-stone of this historic building was laid on Easter Monday, April 1, 1678; it was



The City of Madras.

consecrated two-and-a-half years later. Here Clive was married; here was buried Lord Pigot, who defended the Fort against Lally and afterwards was imprisoned by his own Council; here, too, lie the mortal remains of Sir Thomas Munro, the best loved of all Governors; of the Rev. Christian Frederick Schwartz, the Prussian missionary who loved India and helped England; and of Governor Nicholas Morse, great-great-grandson of Oliver Cromwell. Here, too, is the alms-dish Elihu Yale presented to the church.

Outside the Fort, Madras has developed enormously. Yet even to-day the bulk of her growing export and import trade is done within the shadow of the Fort. Far from leaving the Fort, trade would seem to be returning to its old quarters beside and in front of it. The harbour is not large enough to cope with the traffic with which it is now called to deal. So the Port Trust has acquired twenty-three acres of land to the south of its present limits. This will bring the port in front of the High Court, and beneath the gaze of those sitting on the veranda of the Officers' Mess.

Madras is justly proud of its Marina, of the long drive that borders its coast for some three miles, and glories in the fact that it is unspoilt by big hotels, restaurants, and shops. The harbour has an area of 200 acres, affording shelter in all weathers, and the Port Trust has equipped it with the most up-to-date means for handling passenger and freight traffic. During the year ended March 31, 1929, the port handled 48.64 per cent. of the aggregate trade of the Presidency, the total value reaching Rs.5,202,07,000, while the port revenues amounted to Rs.49,55,974. The principal export is groundnuts, exports of which exceeded all previous records at 345,221 tons. Exports of raw hides and skins grew by 36.2 per cent.

Behind this growing harbour lies a developing Province and an expanding city. The great irrigation works now in process of construction at Metur will bring under wet cultivation some 301,000 acres in the Tanjore and Trichinopoly Districts; the Pykara Hydro-Electric project will supply cheap current to an area developing in industrial importance; the two great railways serving Madras, the South Indian Railway and the Madras and Southern Mahratta Railway, have planned and are carrying out great programmes of reconstruction and development. Everywhere there is progress and improvement. As a result Madras is increasing in importance commercially. Industrially she is still severely handicapped by the absence of coal. Her cotton mills are among the best and most prosperous in India.

INDIA

Madras is a microcosm of the Presidency. Here may be seen sturdy men and handsome women from Coorg, the gaily decorated gypsies from the Agencies; the bright, alert, and capable Malayalees; the placid and valuable cultivator from Tamil districts, and his taller if less placid fellow from the Andhra country. Pilgrims from the far north and distant Burma, journeying to the great shrines of Rameswaram and Srirangam, or going to bathe in the sacred Cauvery, jostle one another in the streets. Madras University attracts students from all parts of South India.

The bazaars are a feast of colour. Here it is always warm; a disgruntled resident has described the climate as "three months hot and nine months hotter." And yet the people are, on the whole, cheerful. They love a tamasha and lose no opportunity to be present at one. Scarcely a night passes without some temple procession with its blaze of lights, the blare of trumpets, the whine of conches, the throbbing of drums, the thunder of rockets, and the shrill note of the flute. All these combine to produce noise, yet not unpleasing noise if one enters into the spirit of the festival. And such scenes are typical of the city's life.

To the visitor Madras offers a variety of occupation almost unrivalled in India; its wonderful beach affords rarely equalled opportunities for bathing; its surf challenges swimmers, and rarely in vain. On the Adyar river pleasant boating is obtainable; sailing may be enjoyed by those who like a small boat and the open sea; while golf, tennis, hunting, racing, and other sports are available in their season.



The Beach at Madras.

CHAPTER IX

SIMLA

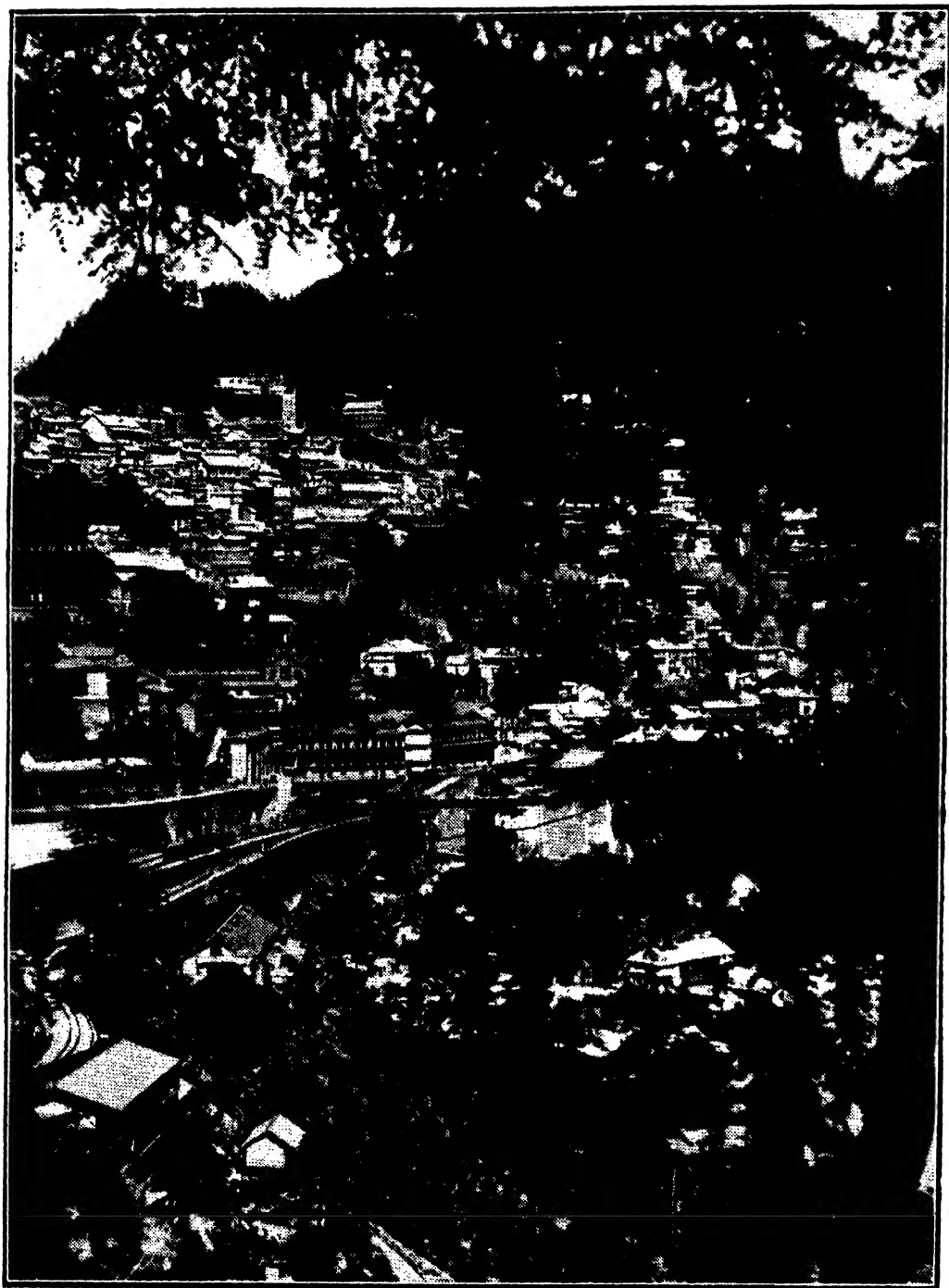
Simla! The word conjures up for people throughout the world the picture of a delightful spot in the Himalayan Mountains, whither the Government of India and other folk retire in the hot weather and spend life in a whirl of gaiety and enjoyment. Kipling's stories have done a good deal to encourage this idea. There was, perhaps, a good deal of truth in it thirty or forty years ago, when public life enabled Government to have an easier time than it does now, and when the simpler needs of the day and the cheaper prices at which they could be satisfied made competition in the smartness of their rickshaw turn-outs one of the chief concerns of Simla Madam Sahibs, in the same sense as the smartness of her carriage and pair in Hyde Park delighted a lady in London. However that may have been, Simla always had its serious aspect, and even in its gaieties was less frivolous than some of its sisters.

The presence of the Commander-in-Chief, or the Governor-General, and sometimes both (as was the case when I was at Simlah) imposes a restraint on the visitors to this sanitarium [wrote an English traveller in 1853]. The younger men are less disposed to run riot and incur the risk of having their leave cancelled and themselves sent down to the Plains; a ball, therefore, at Simlah differs from a ball at Mussoorie.

In recent years the pressure of work upon those who go to Simla on duty has enormously increased as the improvement of communications has gradually abolished its isolation. Even the competition among ladies to be voted the owner of the smartest rickshaw has disappeared with the modern shortening of financial margins.

And Simla to-day is thus much as other official Governmental headquarters in India are, except that it is in the hills instead of in the Plains.

I feel very far from the rest of the world, including India, and I doubt, if I had the fixing of the summer capital of Government, whether I should ever have brought it up here.



Simla, the summer capital of the Government of India.

So wrote Lord Curzon when he first retired out of the summer heat to Simla just over thirty years ago. But Lord Curzon was ever a defender of Simla's reputation as a place of work, and in this respect he praised the great advantages which it offers.

Undoubtedly in the clear and invigorating air, and in the comparative freedom from social and ceremonial toils, the Viceroy can undertake and push on work here which he could never do in the Plains.

When the temperature rises above a certain level in the Plains it induces a condition known as Punjab head, under which the brain loses efficiency. There was formerly much protest in Indian political circles against what was called the exodus to the hills, but the popular chamber of the Indian Legislature created under the Constitutional Reforms of 1919 has more than once formally debated the question, and its vote has always favoured the annual migration.

Simla, its houses "slipping off the hills and clinging like barnacles to hilltops," is, in its appearance, a constant source of entertainment to the visitor and the new-comer. Its population in the season numbers about 70,000. The better-class houses are built upon levelled niches cut into the hillside and are thus picturesquely distributed over the almost precipitous northern and southern slopes of the mountain ridge which the name Simla covers, and of its offshoots. Shaley slopes they are, and after the winter thaws and in the summer rains the houses and the paths which run among them demand endless revetting to keep them in position. The bulk of the population lives in the bazar, as the humbler Indian quarter is called, and there you may see a remarkably cosmopolitan crowd, with members drawn from the Aryan and Moghul peoples of Hindustan, from Dravidian Southern India, from the primitive Hindu hill folk of the villages about Simla itself, from the hillmen of Kashmir, and from the Mongolian population of Tibet.

The Government of India normally retire to Simla from Delhi about the end of March or early in April. They descend to the Plains again at the end of October or early in November. The exact dates of the migrations change from year to year according to current circumstances. The Punjab Government ordinarily move up from Lahore about a month later, the hot weather in Lahore being a shorter season than that at Delhi. Army Headquarters secretariat stays permanently in Simla.

Few more delightful experiences can be imagined when the Indian summer is warming up than one's first impressions of the awakening

season in Simla. Leaving the thermometer with its mercury somewhere in three figures in the Plain, you find Simla radiant and smiling in the delicious spring garment of a temperate climate. With the snow but a few weeks melted; the deodars and hill pines welcome you with arms waving their new year's verdure. Wild flowers decorate the grassy slopes. Gorgeous crimson rhododendrons smile upon you from trees thirty and forty feet high. The gardens are all fresh. The snow-capped mountain peaks and ridges of the Greater Himalayas shine inspiringly before you in a crystal-clear atmosphere to the north. The high air, for Simla lies at over 6,000ft., is delightfully bracing, and in the evenings you welcome a blazing fire upon your hearth.

The Viceroy commonly goes into retreat at Dehra Dun, under the Himalayan foothills, for a week or two while his household moves, and many people take a few days' respite for a tramp into Simla through the hills or from Simla out into the hills and back. A seductive holiday is a trip from Simla along the Hindustan-Tibet road into the interior high country in either spring or autumn, and the break from workaday life which it provides is the more welcome because the opportunities for outdoor recreation in Simla during the three months' heavy rains are restricted. Polo, races, lawn tennis, gymkhanas there are in the early and late stages of the summer. Cricket there is none. The golf course is twelve miles out. The rains stop outdoor amusements except occasional lawn tennis. Society staves off boredom and its dangers by dances, amateur theatricals, and other indoor recreations. There were some who prophesied that with the introduction of the first stages of provincial autonomy under the Montagu-Chelmsford reforms the Government of India would have so little to do that it would diminish and that incidentally Simla would become comparatively deserted. Actual experience has been in the reverse direction. Simla in season is more crowded than ever.



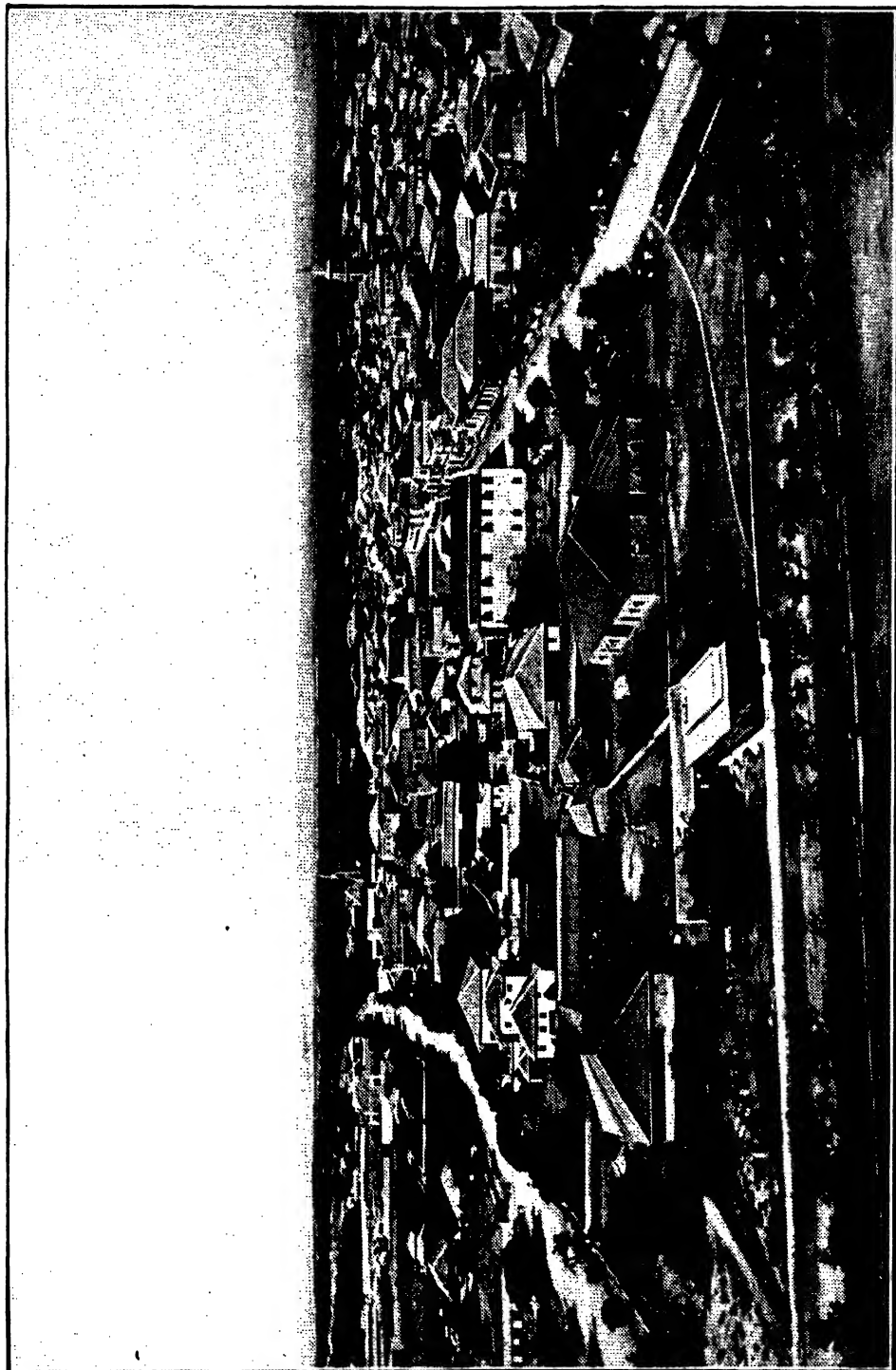
CHAPTER X

KARACHI

By SIR M. DE P. WEBB, C.I.E., C.B.E.

Though Nearchus is believed to have awaited the triumphant Alexander in the lagoon from which the modern harbour of Karachi has been carved, the locality was little known or developed until Russian designs upon India via Afghanistan led to the dispatch of defensive British troops to Karachi in 1834. With the coming of Sir Charles Napier and Sir Bartle Frere a few years later the importance of the place, not only as a military dépôt but also as a commercial port for Sind and the Punjab, was quickly recognized. Under the advice of an eminent harbour authority, the late Mr. E. Walker, a design was adopted (in 1858-60) which forms the base of Karachi's main port developments of to-day. At the same time British enterprise inaugurated the "Scinde Railway," and by 1878 the Punjab could send its products by rail to the Sind port. The extension of this railway by Government to serve the vast tracts of waste lands rendered fertile by Government's great irrigation projects in the Punjab resulted in Karachi's becoming, by the end of last century, the chief wheat port in the British Empire. In recent years cotton has taken the place of wheat.

While these developments were being carried forward the city and cantonment of Karachi were being rapidly improved under the guidance of British officials. Between 1880 and 1884 potable water from the Malir River, eighteen miles away, was brought by underground conduit to Karachi's reservoirs; while in 1895 the Shone hydro-pneumatic system of sewerage was introduced. Electricity for lighting and power purposes followed some years later. An ample supply of building stone from quarries close at hand has enabled buildings of a substantial character and imposing design to be erected for public and commercial offices and for private residences, so that, at the present day, Karachi presents the spectacle of an up-to-date city enjoying all the conveni-



Karachi.

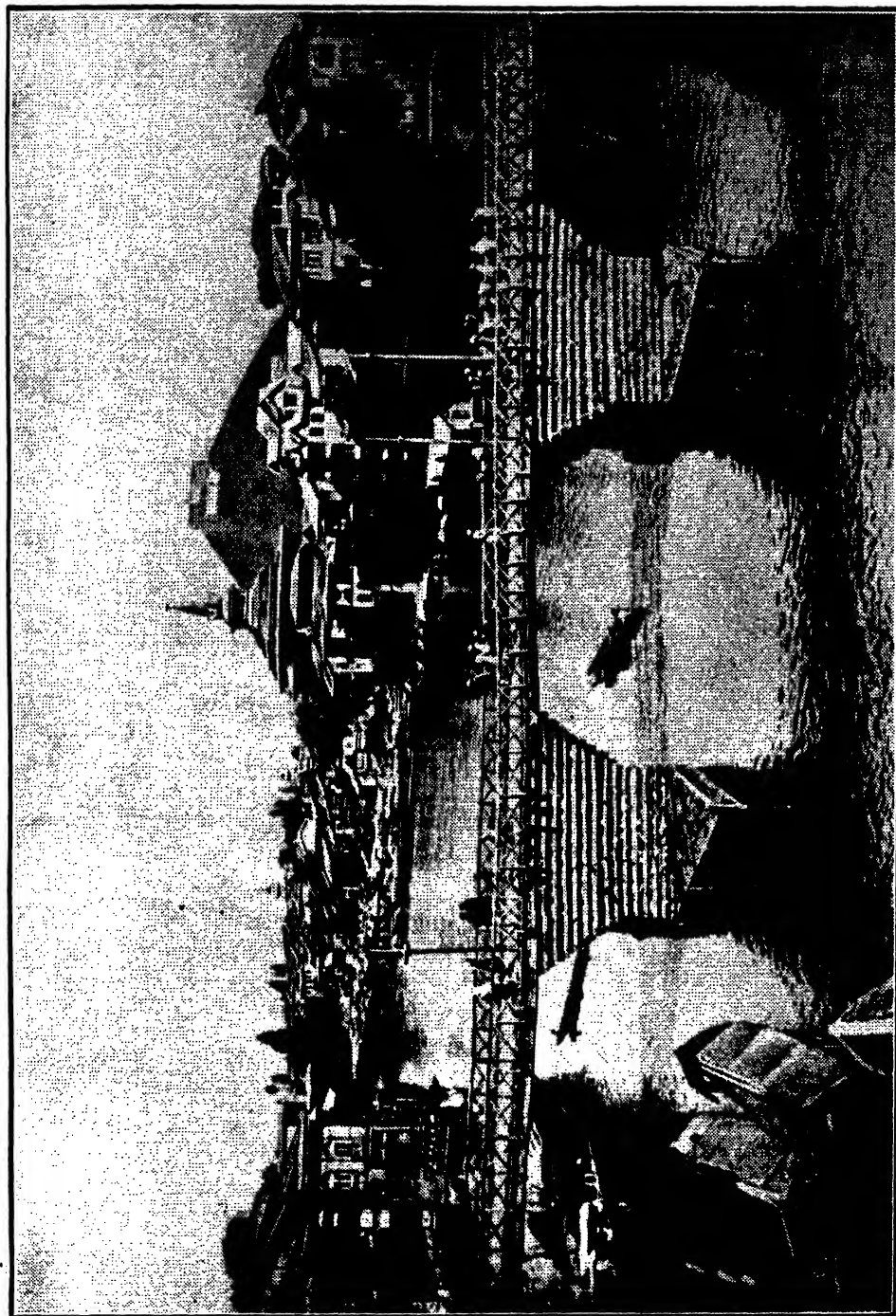
ences and amenities of a modern Western town; while its port facilities, and the ease, rapidity, and economy with which steamers of all types and sizes can be received, discharged, loaded, and refuelled (coal and oil), are second to those of no other port in the East.

Since the British first landed in Karachi in 1834, the population has multiplied twenty times (and is now approximately 220,000), while the value of the total export and import trade has increased nearly 500 times, and is now about £58,400,000. With the Sutlej Valley and Lloyd Sukkur Barrage projects (which will water areas larger than two irrigated Egypts) in full yield, Karachi's trade will expand to a much larger extent.

Geographical position and appropriate climatic and atmospheric conditions have long marked Karachi for development as an airport. The first aeroplane landed in Karachi on December 10, 1918. It was piloted by Captain (afterwards Sir) Ross Smith, and carried, among others, Major-General (now Air Chief Marshal Sir Geoffrey) Salmond. Since then two aerodromes—one military and one civil—have been constructed, together with a completely equipped air base and depôt with hangars, mooring tower, workshops, stores, factories, barracks, and a self-contained cantonment with a population of over 1,000 people—mostly members and employees of the Royal Air Force. The aeroplanes of almost every nation have landed at and flown from Karachi airport, which is on the main route to the East and just half-way to Australia. The Cardington-type mooring mast and the great airship "dock" (800ft. by 200ft. and 180ft. high, the largest building in Asia), now await the arrival of Major Scott with his R 101.

The establishment of the direct weekly air-mail service between London and Karachi has brought India within one week of England. When night flying is possible this period will no doubt be halved. In the meantime a local aero club is encouraging interest in flying, and several pilots, Indian as well as European, have been trained. Thus Karachi can now claim to be well equipped and thoroughly efficient as an airport as well as a seaport.





Srinagar, the capital of Kashmir.

CHAPTER XI

THE VALLEY OF KASHMIR

By SIR WALTER R. LAWRENCE, Bt., G.C.I.E., G.C.V.O., C.B.

A man reputed to know India once said that the Orientals had no sense of landscape. It is easy to say anything of India or of Orientals; yet in Kashmir there sometimes seems to be a quiet love of scenery and beauty. The Hindus look on Shalimar and the Moslems on Martand; never mind what they say, and indeed they say little; but their eyes speak. The reverent appreciation of these warring and vengeful creeds for one another's works inspires the hope that some day, perhaps not in our time, the zealots will cease from troubling and India be at peace.

At any rate, it was an Oriental who likened the exquisite Valley of Kashmir to an emerald set in pearls. They may have no sense of landscape, these Orientals, but in the sweet springtime the Kashmiris flock out from the City of the Sun to sit for hours silent in the lilac groves—not merely the young folk, to whom the time of the lilacs may be the time when love is all, but the old folk too. The spring has come. On a day in April the earth grows suddenly warm, the snow goes and the valley is all at once green from end to end, green with a gossamer veil of blue—the blue of the flag iris. No need now to lift up eyes to the rare beauty of the dazzling snows which circle the valley. There are other pearls as beautiful and less remote. For the almonds this day are in full bloom. The flowers have come before the leaves, like some lovely wanton impatient of her clothes.

All worship this beautiful valley, but there are different rituals. The Orientals whisper “sweet and heartclasp scene”; the Westerns are lyrical in colour words. So different and such worlds apart, the one in the unseen world there, and the other in the world here, both bow down and worship this thing of beauty.

The Moghuls loved the fair valley. The most human of them all, when he was dying on the way to Kashmir, was asked whether he

wanted anything. "Only Kashmir." They left fair gardens and gave to Kashmir the noblest trees in the whole world, the planes with their silver trunks. No one who has camped under the shady plane, which cools her delicate feet in some sweet-singing stream, or in some clear limpid lake, will ever camp with equal pleasure under any other shade. When the quick almond has won all hearts, the blossoms of the apple, the apricot, the pear, stay with us longer and charm our maturer mind. All will-o'-the-wisp, for the real givers of this revel are the sky, the snow, the rivers, and the lakes. There may be other skies—"the blue sky bends over all"—but no such sky and no such dancing, douce air as the day-spring pours down upon Kashmir. No such mountains—the Alps and the Rockies are mere foothills. And for rivers, the valley is old and clings to her ancient friend, the fabulous Hydaspes, in whose venerable progress the gallant Sind and the lovely Lidar join their cool streams. Lakes! There is the largest in all India, the Wular (Ullola, "with high-going waves"), and the loveliest in all the world, the Dal. The world is longing for leisure. Let the world paddle slowly in flat-bottomed boats over the Dal when summer is young, when the pink and white lilies lie open to the sun; or in autumn when the lake is crimson and gold with the planes and the poplars. The world should see the merry camps—white tents on the green turf of the garden of breezes, and the house-boats by its sloping shore. And behind are the ponies which to-morrow will carry the careless pilgrims to other fair swards by some stream or river; or to the mountain meadows gay with flowers, and ringed with the snow ranges.

In this garden of breezes they live deliciously, and sometimes, perhaps, think of the great Akbar, who first grasped its immortal beauty. Near by are other terraced gardens made by Jehangir and Shah Jahan; and there is a little river by one of these gardens where the English, who have wisely left no tracks in Kashmir, have added something. That something is the brown trout of England, and to-day "men may catch such trout as do not often come to bank or boat in either English or Scottish rivers or lakes." Sometimes, in doubting mood, men ask what England has left in India that will last. Let the brown trout answer for Kashmir.

Pretty children bring little baskets of enchanted fruit to the pilgrims, and the fruit is worthy of the fair blossoms. Nothing in the wide world will match the plump, ripe bigarreau and the white grapes which have no seed. The very cattle and sheep can help themselves at discretion to the luscious gold of the apricot, which almost paves the paths by the

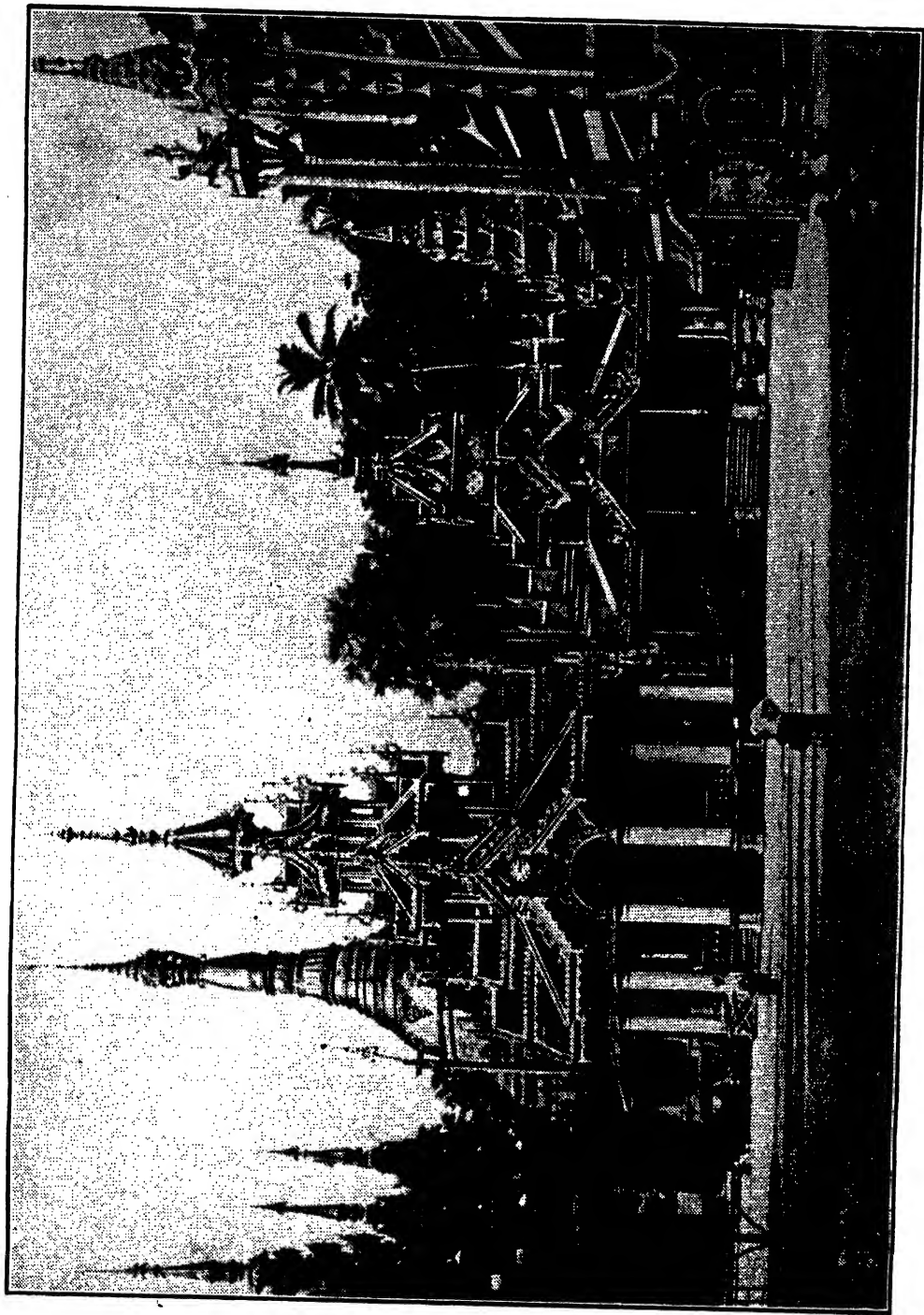
riverside. Up the valley slopes there is wild rhubarb and asparagus, which forlorn Lucullus never knew.

Pylons and progress, wire and cement, may some day change the happy valley. But Kashmir is holy ground to the Hindus, and whatever gods there be they seem to have gently intervened when mortals dreamed of railways and oil-fields. Even the great and costly barrage, where the river tumbles out of the valley like a drunken giant, must mask its power, for the valley is not electrically minded.

And the people? There is a story of the classic lovers of the East, Laili and Majnun. The fame of their love went through the land and reached the Palace, for Majnun was a poet and must be singing of Laili and her loveliness. The King sent for her, was not greatly impressed, and turned in his disappointed wrath on Majnun and asked him to explain his extravagant estimate. "Your Majesty," said the trembling Majnun, "you should see Laili through the eyes of Majnun." And so, if the reader will see the Kashmiris through the eyes of him who writes he will know that the men of Kashmir are fine in stature, frugal and domestic in their lives, witty in their conversation, and very clever in agriculture and the handicrafts; while the women are said to be the loveliest in the East. And all are kind to children.

And its government? Well, the country is simply and efficiently governed by an Indian Ruler, a Hindu. The people of the valley are Moslems. The Ruler comes of a race of rulers and has learned his business from his ancestors. In the East it is a business, very personal, and very difficult for men who have never ruled—whose ancestors have never ruled. Though there may be a rare policeman in the City of the Sun, the villages are lacking both in police and in crime. Perhaps this is the reason of our calling Kashmir "The Happy Valley."





Shrines at the Shwe Dagon Pagoda, Rangoon.

CHAPTER XII

BURMA AND THE BURMANS

By SIR HARCOURT BUTLER, G.C.S.I., G.C.I.E.

Burma is one of the fairest countries of the British Empire. Approaching Rangoon after two days' passage from Calcutta one enters a new world. Rangoon itself is cosmopolitan, only one-third of the population being Burman, but pagodas and monasteries, monks in the yellow robe, dignified men and dainty ladies in richly coloured silks proclaim the Silken East. A coastline of 1,000 miles, an archipelago of some thousand islands, an extended land frontier touching China, Indo-China, and Siam, long ranges of hills separated by great rivers and fertile valleys, a dry zone between two wet zones, vast rice plains in Lower Burma, glistening pagodas on hill-tops, wooden and bamboo homesteads on wooden piles, extensive and rich forests, oil-fields, precious stones and mineral wealth—these make up Burma. The rivers and creeks are still the main highways, but over 2,000 miles of railway are open and good metalled roads are being made. The people are generous, impulsive, artistic, mechanical, lovers of sport and racing, often passionate and vain, always sensitive as to personal honour, not yet given—perhaps because not yet driven—to sustained manual labour, but capable of great effort, full of humour and humanity. The “Irish of the East,” they have won all hearts. In working timber and rice they yield to none. There are marked differences of race and language, and minorities require protection, but of the total population of 13,000,000 some 11,000,000 are Buddhists. They have none of the fierce religious animosities found in India, no caste system, no purdah system, no great social distinctions, no landed aristocracies except in the Shan States, where chieftains rule in ancient ways over simple folk.

And whereas in India the people look to Government as an earthly providence, in Burma Government is viewed as an earthly nuisance to be kept at arm's-length. The monks, estimated at 80,000, are gene-

rously supported by the people and have still great influence—every Burman has to wear the yellow robe for a short period, if only a few days. They are under no central ecclesiastical authority. Of late some have taken to politics and dream of the restoration of a Burman Kingdom and monkish supremacy. They number some thousands in Mandalay alone—the fascinating capital of the last Burman kings, with its Royal palace, huge monasteries, and relics of a greatness that has passed away.

The province was annexed piecemeal after the three Burman wars, Arakan and Tenasserim in 1826, Rangoon and Lower Burma in 1852, Upper Burma in 1886. The pacification of Upper Burma was lengthy and troublesome. The forces of disorder are near the surface, and violent crime is unduly prevalent, but peace has brought wonderful progress and prosperity. Modern Burma dates from the opening of the Suez Canal. Much land was then brought under cultivation to grow rice for export. The annual export now exceeds 3,000,000 tons. British firms, mainly Scottish, invested huge sums in opening up the province in other ways. Its present prosperity is principally due to the Irrawaddy Flotilla, the Bombay Burma Trading Corporation, the Arakan, the Burmah Oil, Steel Brothers, Burma Corporation, British India Steamship, Macgregors, Bullocks, and other large companies which employ hundreds of thousands and pay salaries and wages running into millions a year, not to mention their large contributions to taxation and the support of social services. Chinese and Indians also came to settle. Over 350,000 Indian coolies come over every year to reap the rice crop and return with large savings.

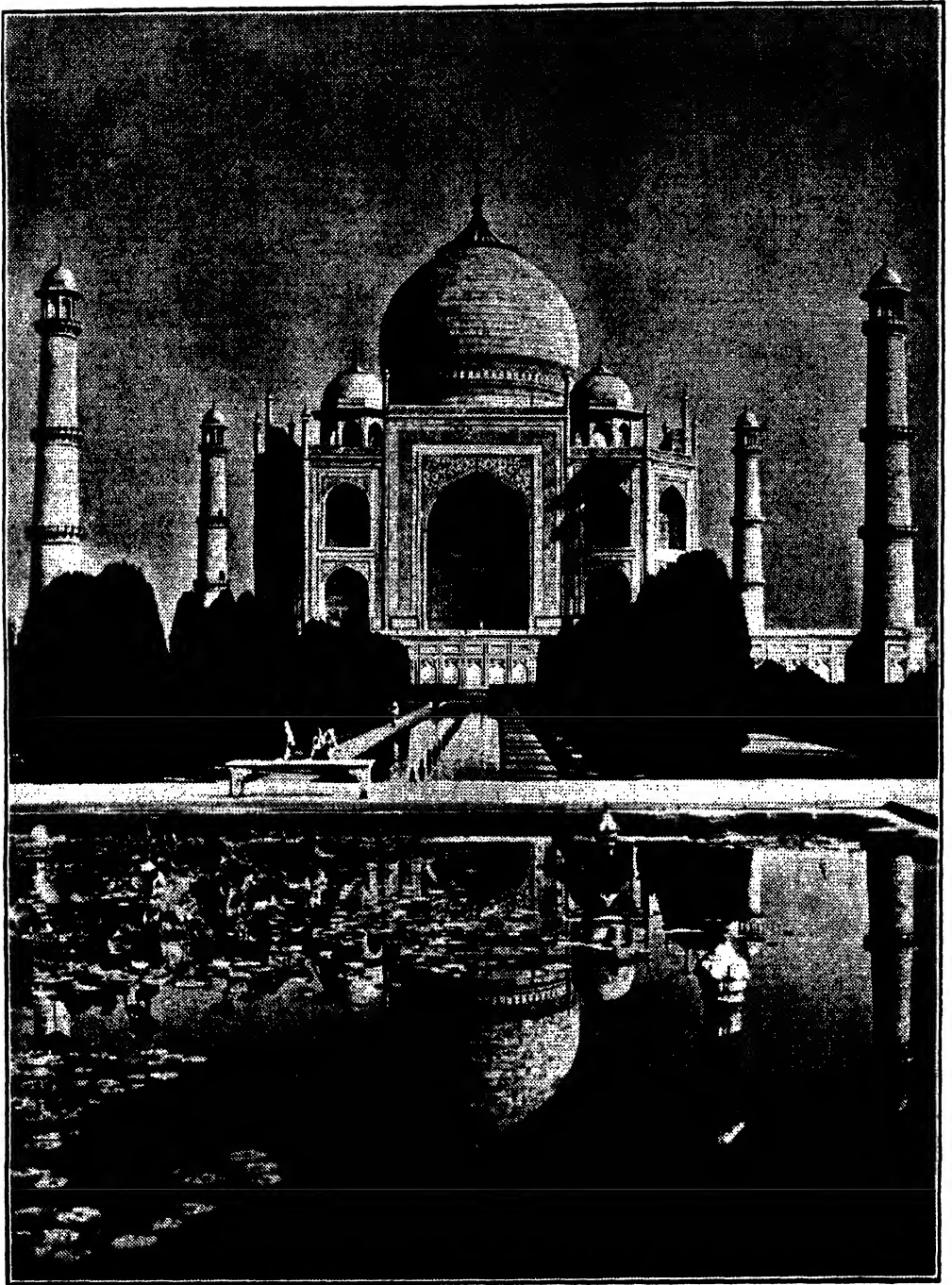
The standard of comfort and living is higher in Burma than in India. But economic pressure has begun. Indian and Chinese competition is felt, and the cry of "Burma for the Burmans!" has of late become insistent. This and the general feeling that Burma is not well treated by India in the matter of finance have led to a demand before the Statutory Commission for the separation of Burma from India.

The Burma Government has recently summed up the arguments for and against separation. The leading arguments for it are that Burmans differ radically from Indians; that they cannot have an effective voice in an Indian Legislature; that their interests have already been subordinated to those of India in such matters as the protective steel duties, the export of hides, the manufacture of salt, and that their disadvantages in this respect will increase as an Indian Legislature grows stronger; and, finally, that they would gain financially by sepa-

ration. The leading arguments against it are that Burma is wedged between India and China, that it depends on India for defence, for labour, and for cheap credit—an important point for a country which requires loans for development. A north-east frontier question may again become obtrusive, as it did some twenty years ago when the Chinese occupied Lhasa.

Burma is the biggest province of the Indian Empire in area, but its population is rather less than that of the Central Provinces. Its higher education is behind that of India, but it is building and organizing a university on lines in advance of anything in India. The practical difficulties of separation are admittedly great. At the last Burma dinner Lord Reading emphasized the necessity of safeguarding defence, law and order, standards of British justice and administration and commercial interests. The financial aspect of separation is at present vague, as the claims of India are not known. How far Burma would gain financially by the change depends on the terms to be fixed and the cost to the province of transferring various services (with due regard to efficiency and public convenience), defence, railways, Customs, currency, posts, telegraphs, income-tax, &c., from central to provincial revenues. There is reason to think that Burma did not get anything like her fair share of the remission of provincial contributions, because that remission dealt with direct contributions only, and Burma's main contribution to central revenues was indirect, amounting to over two crores of rupees a year in duties on rice and oil. The case for Burma is in the very capable hands of Sir Charles Innes and his advisers, and will surely receive sympathetic consideration from the Commission.





The Taj Mahal.

PART VII
THE MONUMENTS OF INDIA

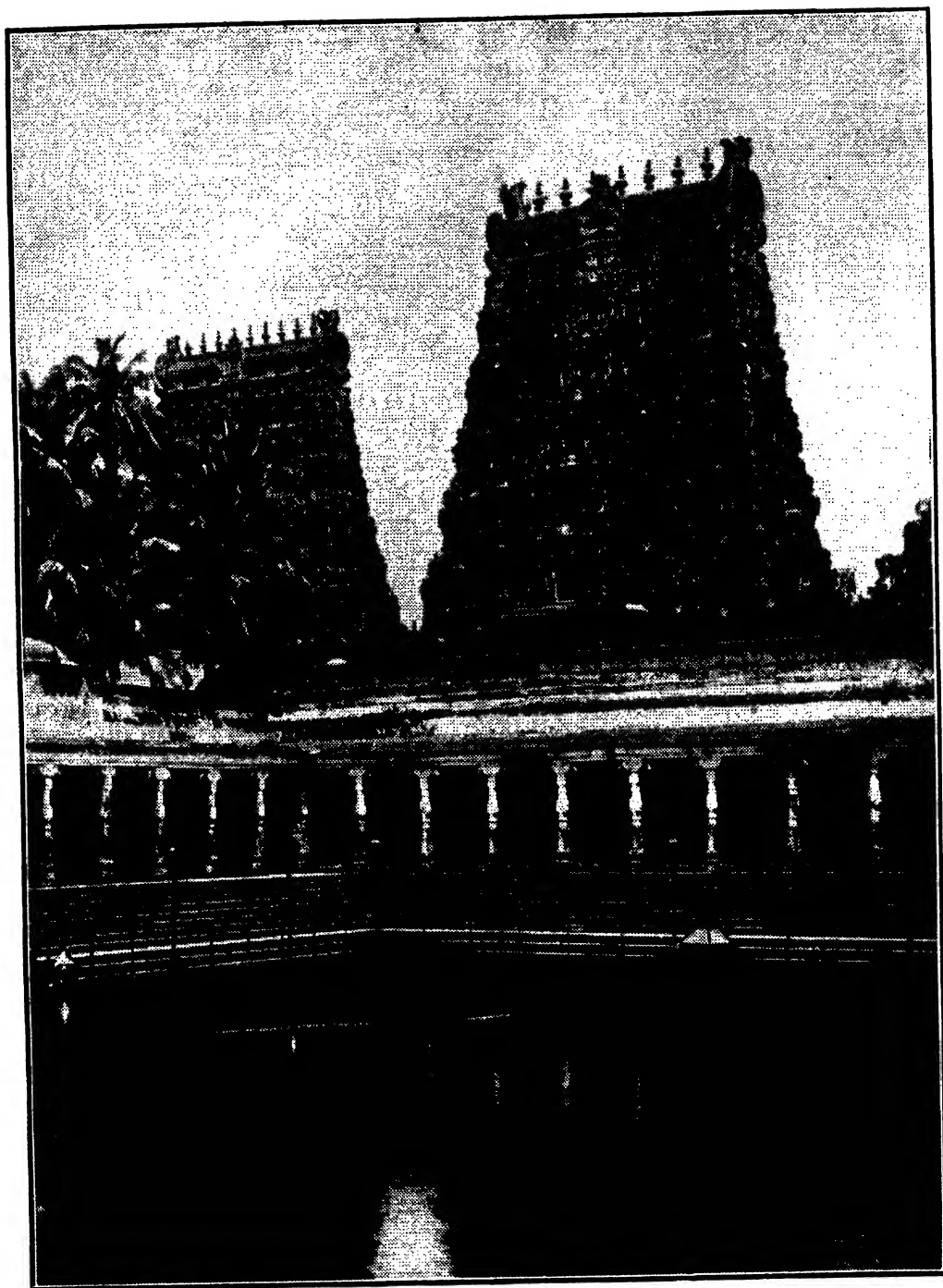
CHAPTER I

TEMPLES, MOSQUES, AND PALACES

Every one who thinks of travelling in India looks forward to a sight of the temples, mosques, tombs, and palaces in which much of her history is written; but though some of the best of these are to be found in the big cities, which are easily reached in a few weeks' cold-weather tour, there are many others lying off the beaten track to which a special pilgrimage is necessary.

The buried cities which excavators' spades are bringing to light in the Sind Valley have a special interest for the archæologist and race-historian, and may be expected to illuminate some region of the darkness in which the antiquity of India's civilization is hidden. But of the standing monuments which primarily interest the tourist, none dates later than about 260 B.C., when the great King Asoka carved on rocks and pillars the main precepts of the Buddhist faith. Two of the Asoka pillars are to be seen at Delhi—one in the ruined palace of Feroz Shah, and one on the Ridge near Hindu Rao's house. A better pillar, which also bears later Gupta and Moghul inscriptions, rises in the Fort at Allahabad.

The finest specimens of Buddhist building, however, are the topes (*stupas*) which mark some spot sacred to Buddha, or were meant to contain some relics of his, the rails which surrounded these and other holy places, the *chaityas* or churches, and the *viharas* or monasteries. Far the most impressive group that survives is that at Sanchi in the Bhopal State, on the railway between Bombay and Agra. Topes, rails, monasteries, and some later temples are nobly set on a hill commanding wide and beautiful views, and the visitor will indeed be dull of imagination who does not feel the sanctity and grandeur of a place that is almost comparable with the Acropolis. Less impressive than Sanchi, but not less interesting, is the tope at Sarnath, near Benares, which marks the beginning of Buddha's mission as teacher. The work of the Archæological Department, described by Mr. Hargreaves in the following

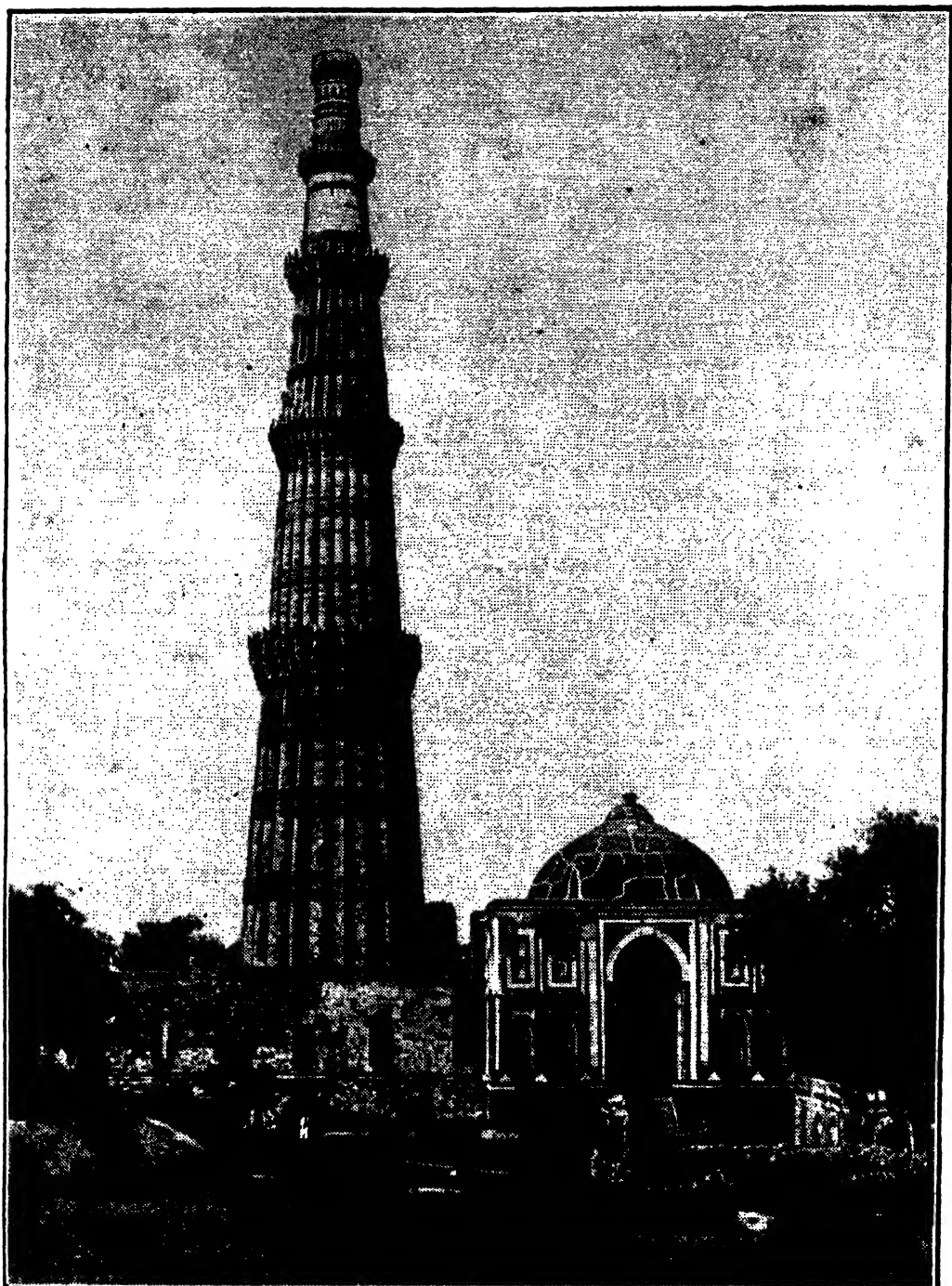


The Golden Lotus Temple, Madura.

chapter, has made the purpose of the several buildings very clear, and an admirable little museum houses some famous pieces of Buddhist sculpture. Holier than either of these in Buddhist eyes is the temple at Buddh-Gaya, near by the bodhi-tree where Buddha attained enlightenment, a lofty pyramid-like building said to have been built by a Brahman in the days of religious tolerance about A.D. 500, before Buddhism was swept out of India by the Brahmanic revival. The later development of the characteristic Buddhist railing can be studied best at Amraoti and Bherhut, but the best specimens of *chaityas* are the rock-hewn caves of the Bombay Presidency, of which the most famous are those at Karli, Bedda, Nassik, Ajanta, and Ellora. Some of these in plan are curiously like an early Christian church, with nave, aisles, and apse. Karli is architecturally the finest, but the cave pictures of Ajanta have a nobility which the art of painting never again attained in India, and from them some of the best Indian artists of to-day draw inspiration.

Buddhist architecture, as the rail conspicuously shows, was derived from building in timber. To the Jains belongs the credit for the introduction of the dome. It is characteristic of the Jains that they mass their temples together on hilltops, as at Palitana in Gujarat, or Mount Abu in Rajputana, where the temple of Vimala Sah is one of the noblest examples of the style. There are notable groups also at Khajuraho in Central India, and at Deoghar in the Jhansi district. Later Jain work is to be seen at Sunagir, near Datia, but by this time the bulbous Moghul dome has mingled with the pyramidal spire of earlier days.

Fergusson lays it down that all that is intellectually great in India pertains to the Aryas, and all that is artistically great belongs to other races, either aboriginal, or earlier or later immigrants than those from the north. The great Hindu temples are to be found in the Dravidian country of the south in amazing numbers and variety. They are remarkable less for their beauty than for their cathedral-like size, and for a profusion of ornament which to many Western observers is unpleasing. Often they are enclosed within high walls with towering doorways in each face. The general impression is one of colossal labour and effort which somehow fails. A journey from Madras through Tiruvallur, Conjeevarum, Vellore, Polur, and Chilambaram to Tanjore and Srirangam, and thence on to Madura and Rameswaram on its island, enables all the finest examples to be seen, even at the risk of satiety.

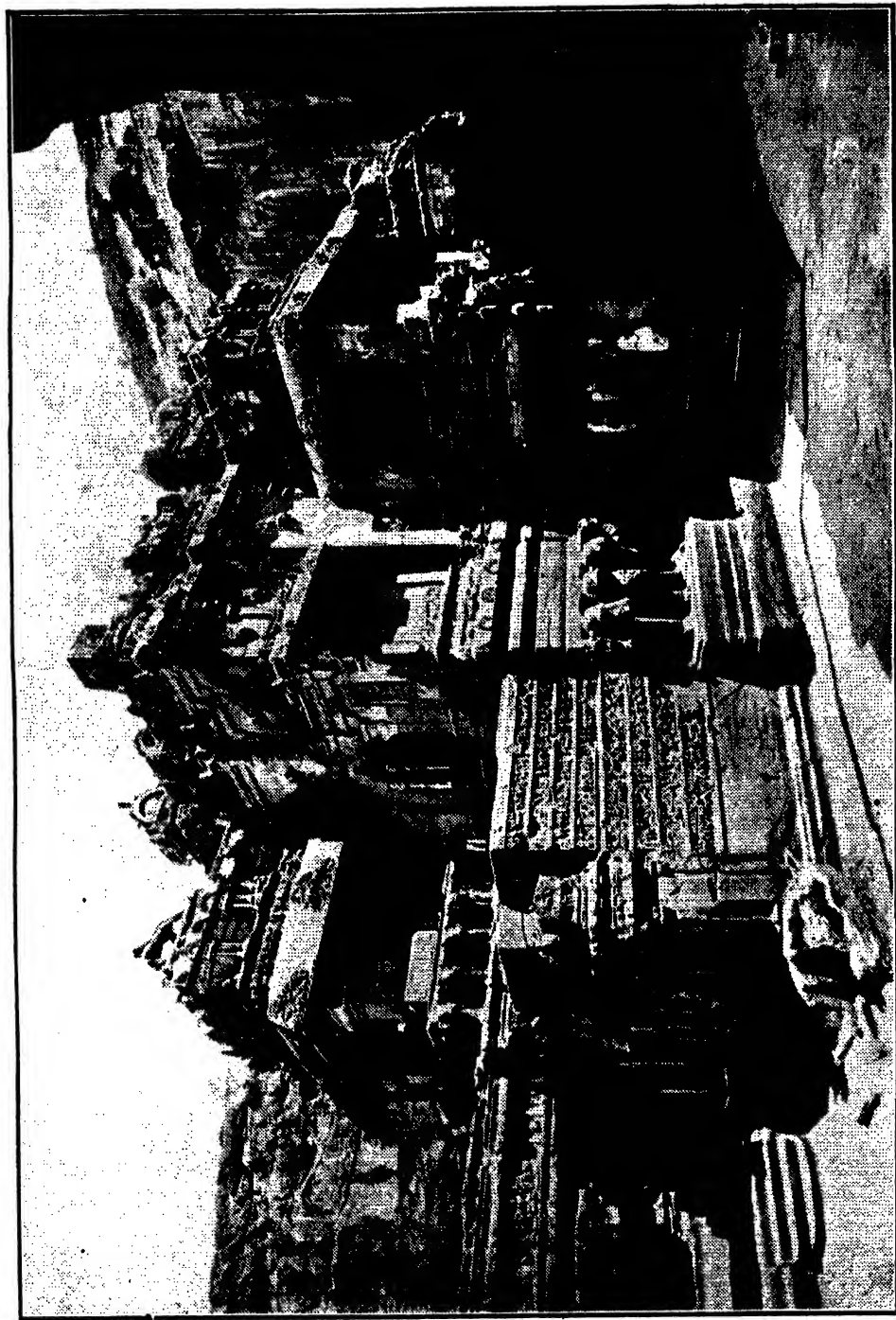


The Kutb Minar.

Hindu temples in Northern India are generally smaller, simpler, and more scattered, except where they are multiplied to serve the pilgrims at a place of special sanctity. There are few pleasanter sights in the northern plains than that of the flame-like spike of the *shivala* peeping over the village trees like some country church spire in England. But the pulse of Hindu worship at its strongest is to be felt at a few famous places along the holy rivers; notably at Hardwar (the gate of Hari), where the Ganges breaks into the plain through the outer hills; at Muttra, on the Jumna, where Rama sported with the milkmaids; and, above all, at most holy Benares, where, if he could, every Hindu would come to die.

High above the crest of the Benares river-bank and on the site of an old Hindu temple soars the Mosque of Aurangzeb, a striking reminder that in later days a new race and a new religion had entered India. The main development of Moslem building in India can be observed at Delhi and Agra. Nearly 800 years ago Kutb-uddin proclaimed himself Emperor and built the Kutb Minar; "beyond comparison," says Sir Valentine Chirol, "the loftiest and noblest form in which the Musulman call to prayer has ever gone forth"; and with it the mosque known as the "Power of Islam," on the site of Hindu temples and constructed of materials torn from them. To this time belongs also the finely decorated tomb of Altamsh, Kutb's successor. The Alai Darwaza close by pertains to the next dynasty. A few miles south are the titanic ruins of Tuglakabad, and the soldierly tomb of Tughlak Shah, the outstanding figure of the fourteenth century. Closer to New Delhi rise the tombs of the Lodi kings, with their low strong domes and buttressed octagonal walls. Akin to these is the severe and massive Black Mosque in Delhi City. But meanwhile under Moghul governors, who had assumed independence as the Sharqi kings, were built the Jama Masjid and the Atala Masjid at Jampur, splendid virile creations with massive propylons screening small domes or barrel vaults and with no minarets. At Mandu, too, in Central India, Hushang, the founder of the Ghoris, built himself a capital, which till to-day is majestic in ruin; and at Gujarat Ahmad Shah and his successors have left notable monuments, only surpassed by those of Bijapur, when Vijayanagar, the last Hindu kingdom in the south, had fallen before the Moslem conqueror.

With the coming of the Moghuls the great age of Moslem building was reached. Baber certainly built, though no work of his has been identified. His son Humayun's tomb stands out prominently south of Delhi; and to the usurper Sher Shah is attributed a beautiful mosque



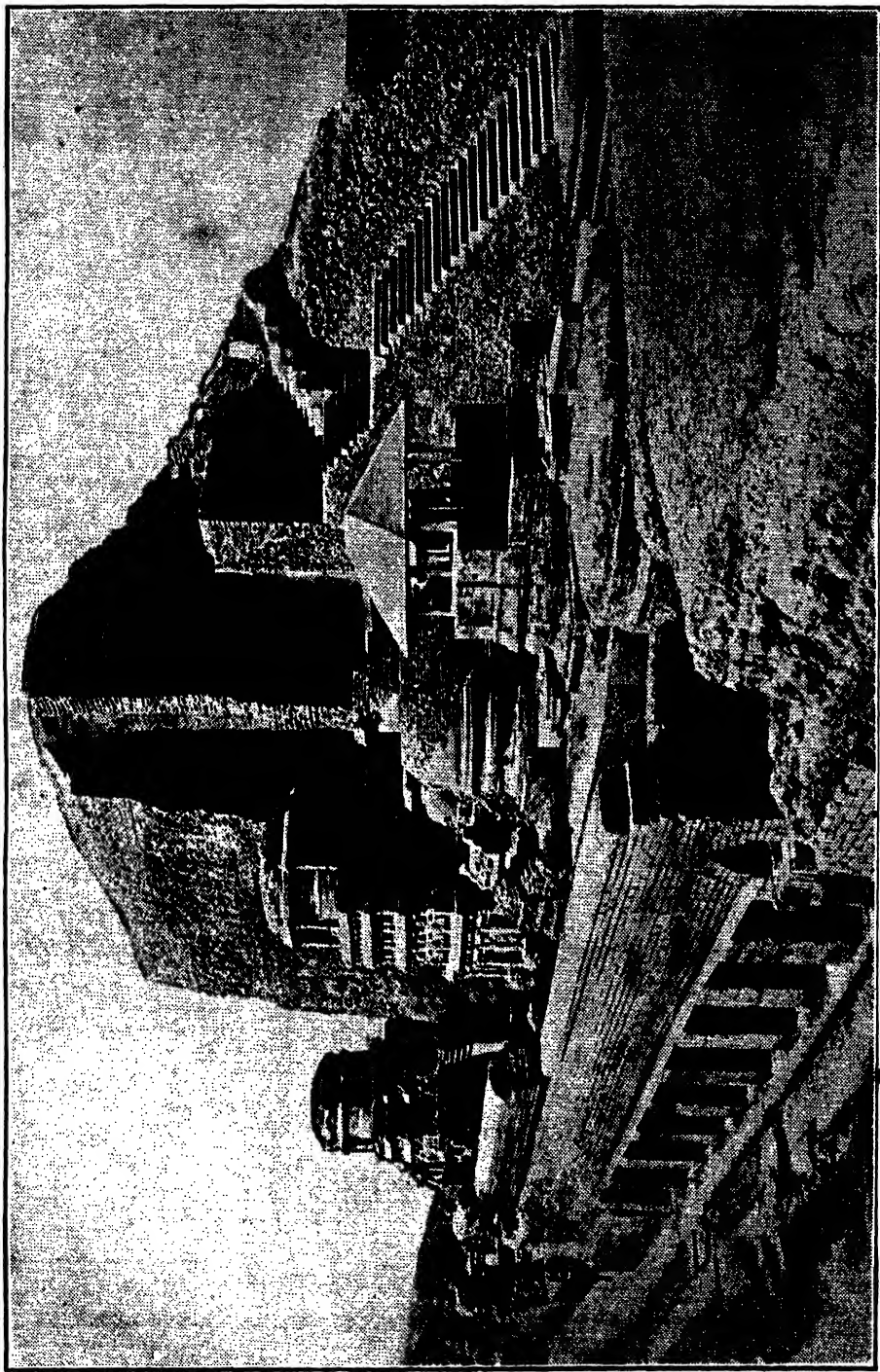
The rock-hewn Kailasa Temple, in the Ellora Caves, Hyderabad State.

in the fort of Purana Kila. Akbar has left us not merely the great forts of Agra, Delhi, and Allahabad, but the old palace in the Agra Fort and the immortal city of Fatehpur Sikri, and his own stately tomb at Sikandra. Less known than these, but still worthy of a visit, is his hall of audience in the Allahabad Fort. Jahangir built himself a mosque and tomb in Lahore, as well as a tomb for his minister Itimad-uddaula in a garden by the Jumna at Agra.

But the greatest of builders was Shah Jehan, who has given us not only the unequalled Taj and the great mosques both at Delhi and Agra, but also the imperial palaces within the forts at both capitals, which, after suffering many evil things during a utilitarian usurpation, have been partly restored to their ancient beauty by the Archæological Department which India owes to Lord Curzon. Upon these world-famous creations there is here neither need nor space to dwell.

Nor is it possible to enumerate the tombs of the princes and nobles of the Moghul Court which are to be found throughout the country. Worthy examples are those in the Khusru Bagh, at Allahabad, or the tomb of Safdar Jang, at Delhi. The decay of Moghul building is best exemplified in Lucknow, where, with the possible exception of the great Imambara, the sheer size and long horizontal lines of which redeem its other weaknesses, there is hardly a palace, tomb, or mosque that escapes banality, at least of a later date than the little mosque on the Lachmantila hillock by the Goomtee, with slim white minarets rising against a blue sky and wind-sown vegetation sprouting from its dome.





The Buddhist site of Nalanda, in Bihar and Orissa.

CHAPTER II

EXPLORATION OF ANCIENT SITES

*By H. HARGREAVES, Officiating Director-General
of Archeology in India.*

Of all the treasures of which India can boast none more truly deserve that name than its ancient monuments, those mute witnesses to its former culture and the products of its genius through more than 4,000 years. Of its monumental antiquities nothing earlier than the third century B.C. had, until recently, been recovered, but the discovery of the structural remains of the chalcolithic sites of Mohenjo daro and Harappa has carried these back to the third millennium before the Christian era.

The Archæological Survey of India was instituted in 1862, when General Cunningham and a small staff were appointed to survey the monuments of Northern India. Twelve years later another survey on similar lines was set up in the Bombay and Madras Presidencies, and this was followed by the appointment of a Curator of Ancient Monuments for their classification. Lord Curzon's Government remodelled the Department and placed it on a sound administrative footing by uniting the Provincial surveys under a single head and by defining its own responsibility. To this end the post of the Director-General, which had been allowed to sink into abeyance in 1889, was revived in 1902, and the history of the Department for the last twenty-seven years is largely the record of the successful labours of the then appointed Director-General, Sir John Marshall.

The first duty of the Archæological Department was the survey of the monuments; and a recently compiled list reveals the interesting fact that the Central Government accepts responsibility for the maintenance of no fewer than 3,170. They include ancient sites, baths, bridges, caravanserais, caves, forts, gardens, gateways, inscribed rocks, images, kos minars, monasteries, mosques, palaces, pillars, stupas, tanks,

temples, tombs, towers, wells, and the walls of ruined and deserted forts and cities, as well as some 400 miscellaneous buildings and objects.

Though the greater part of the archæological budget is expended on conservation, research in the way of exploration of ancient sites has for the last twenty-seven years received continuous attention. Excavations in the North-West Frontier Province, at Taxila in the Punjab, at the famous Buddhist sites in the United Provinces and Bihar and Orissa, at Hmawza and Pagan in Burma, and in the Madras Presidency have all yielded the most valuable results and placed at the disposal of scholars in all parts of the world material for numerous publications on the history, art, and architecture of India.

The discovery in 1923-24 of an early, highly developed, widespread, and hitherto unknown civilization in the Indus basin at Harappa in the Montgomery district of the Punjab, and at Mohenjodaro in the Larkana district of Sind, excited the liveliest interest and gave rise to many conjectures as to its date and origin. At first with some temerity designated Indo-Sumerian, and later, with more circumspection, the Indus Valley culture, it will in all probability be found to be part of a more widely spread Indian civilization. Support is lent to this view by the recovery, a few months ago, of pottery of this Indus Valley type in a low mound near Rupar, in the Ambala district, within five hours' motor journey of Simla. Its existence so far west in the Punjab, near the watershed of the Indus and Ganges; renders it highly improbable that it was confined to the western river system. It will, however, be for future excavations in the Ganges basin to settle the question.

Explorations at Mohenjodaro and Harappa were continued in 1929. At the former site a large area, some 23ft. below the surface and marking the fourth level of occupation, has been exposed to view, and it is now possible to walk through the streets and to enter many of the buildings as easily as did its original inhabitants more than 4,000 years ago. At Harappa structural remains were scanty, but numerous antiquities, including 116 pictographic seals and sealings, were recovered. Certain new types of seals and sealings recently obtained at these two sites are of the greatest importance, as they give a strong Indian orientation to this Indus Valley culture, and it is not improbable that these sites may later yield definite prototypes of Indian deities and traces of cults and art motifs which persist to the present day. Unfortunately, despite expert researches, the pictographic script yet defies decipherment.

At Taxila systematic exploration of the ancient remains has virtually brought to a close for the time being operations in the Scytho-Parthian city of Sirkap. The opening of earlier strata has now been taken in hand, and there is every prospect that the excavators will succeed in pushing back the story of this civilization for several more centuries.

Explorations at Nagarjunikonda, in the Guntur district in the Madras Presidency, have resulted in the recovery from various stupas of six gold and five silver reliquaries. The relics found in the "Great Stupa" appear to be assignable to the second-third century A.D. and are of special interest, the inscriptions from the monument stating that it was erected to enshrine a relic of the Buddha himself.

In Bihar and Orissa the exploration of the famous Buddhist site of Nalanda continued *pari passu* with its conservation. In conserving these remains, which range in date from the sixth-twelfth century A.D., an endeavour is being made to exhibit a definite portion of each of the several structures erected on the ruins of others throughout the long occupation of the site.

To the organization and development of museums as centres of research and education the Archæological Survey has devoted considerable attention. It maintains the archæological section of the Indian Museum at Calcutta, small museums at the Taj, and at Delhi, Agra and Lahore Forts, and has erected local museums at the excavated sites of Taxila, Sarnath, and Nalanda, with the object of keeping the small movable antiquities recovered in close association with the remains to which they belong, so that they may be studied amid their natural surroundings and not lose focus and meaning by being transported to some distant place.

The epigraphical material dealt with by the Archæological Survey has enabled the history and chronology of the various dynasties of India to be established on a firmer basis and in greater detail. The "Epigraphia Indica" is now in the nineteenth volume, a revised edition of the Asoka inscriptions was recently published, and the companion volume of post-Asokan inscriptions will appear shortly. Moslem inscriptions are dealt with in "Epigraphia Indo-Moslemica," and this branch of research is to be strengthened by the appointment of additional staff.

The most important epigraphical discovery of 1929 was the recovery of a new and complete recension in the Brahmi script of the fourteen Rock Edicts of Asoka, close to the village of Yerragudi, situated approximately in 77deg. 34min. E. and 15deg. 12min. N., some eight

INDIA

miles from the town of Gooty, in the Kurnool district of the Madras Presidency.

With enlightened liberality the Government of India has not confined its interest to Indian archæology, but has financed, in whole or in part, expeditions to regions having cultural affinities. In 1909 it provided funds for Dr. Francke's journey through Indian Tibet, and from 1901 onwards for Sir Aurel Stein's three prolonged journeys to Chinese Turkestan. The results of Sir Aurel Stein's most successful researches have already appeared in published reports, the last, "Innermost Asia," being issued in 1929. The interesting and valuable frescoes and other antiquities recovered in these three expeditions are now housed in two separate buildings in New Delhi, and when appropriately exhibited in the contemplated new museum will doubtless form one of the greatest attractions of the new capital.



A polychrome vessel found in an Indo-Sumerian grave in Baluchistan.

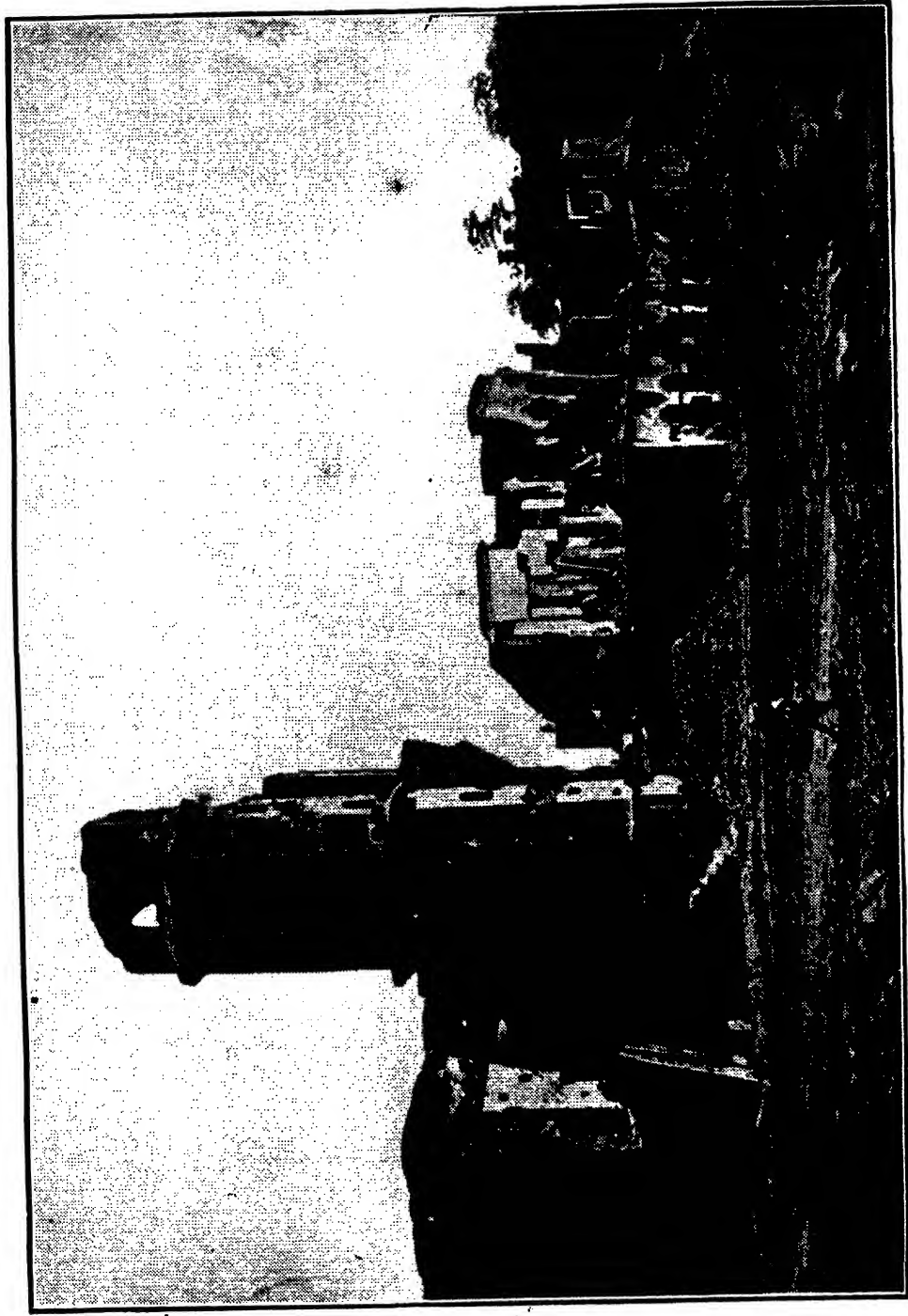
CHAPTER III

HISTORIC PLACES OF THE MUTINY

A variety of causes contributed to produce some highly combustible elements in the India of 1857—annexations by Lord Dalhousie, the fundamental difficulty of political development under the Company's rule, discontent among the sepoys and Indian officers, dangerous reductions of the British troops, the drafting of many of the best officers of the Indian Army into civil employ, and years of anarchy and extravagance under the king's régime in Oudh, when the carrying of arms was universal and hordes of professional criminals and bullies were ever on the look-out for chances of plunder.

In such conditions only a spark was needed to kindle the flame. After a few warnings in Bengal, the sepoys mutinied at Meerut on Sunday, May 10, 1857. The intelligence system was poor and the rising seems to have taken the staff by surprise. The mutineers broke open the gaol, murdered any European they encountered, and dashed headlong to Delhi, only forty-four miles away, there to place themselves under the dethroned Emperor. Meerut had a large force of British troops, and a commander of decision would have overwhelmed the insurgents at the outset. He did nothing but warn Delhi by telegram. The Mutiny spread like wildfire. From Delhi and Agra to Cawnpore the country was in chaos; nearly the whole of Rohilkhand and Oudh slipped from our control. It is round the three cities of Delhi, Cawnpore and Lucknow that the story of the Mutiny chiefly centres.

Fortunately men rose to the occasion who worthily sustained the great traditions of our race and showed in remarkable degree the highest qualities of leadership: John Nicholson, "the lion of the Punjab," at Delhi; Sir Henry Lawrence, Havelock, Outram (the Bayard of Oudh), and Inglis at Lucknow; Neill, Hodson, Baird Smith, Roberts, Kavanagh, and many others too numerous to mention. Recalled from civil employ as Deputy Commissioner of the turbulent district of Bannu, John Nicholson took command of the Punjab movable column, whose operations effectively checked the mutiny spreading in that province. He reached Delhi about the middle of July



The ruins of the Residency at Lucknow, from a photograph taken after the reoccupation of the city in 1858.

to find a spineless general in command and no progress being made. "From the moment of his arrival he was the life and soul of the army," and thanks to his genius the city was captured in September, 1857. Nicholson "led the assault but fell in the hour of victory mortally wounded" at the early age of thirty-four. He is perhaps the most striking figure of this time. He had to contend with enormous odds, and the price of failure was the loss of the Punjab. His dominating personality, his courage and determination, carried the day and saved India from a grave calamity.

But probably no achievement in British history stirs the blood of Englishmen more deeply than the defence of Lucknow. Lord Canning, Viceroy and Governor-General of India, expressed his admiration of the defence of Lucknow in words which are inscribed on a marble tablet in the entrance hall at the Residency.

There does not stand recorded in the annals of war an achievement more truly heroic than the defence of the Residency of Lucknow. On June 30th, 1857, the day after the battle of Chinhat, the siege began.

On the 2nd July Sir Henry Lawrence was mortally wounded by a shell which burst within the Residency building. The command then devolved on Brigadier J. E. W. Inglis, H.M.'s XXXII. Regiment.

The force within the defences then consisted of 130 officers, British and native, 740 British and 700 native troops and 150 civilian volunteers. There were 237 women, 260 children, 50 boys of La Martinere College, 27 non-combatant Europeans, and 700 non-combatant natives, being a total of 2,994 souls.

This tribute is taken from a General Order or Proclamation, issued by Lord Canning soon after the final relief of the Residency, which continued the story in these words—

From the 30th June to the 25th September, for 86 days, they were closely invested and subjected to a heavy artillery fire day and night on all sides and had to sustain several general attacks. On the 25th September, 1857, Generals Outram and Have-lock with a large force endeavoured to release the garrison after having, with great loss, effected a junction with them. They were, however, unable to withdraw, and the whole combined force was besieged for a period of 53 days until finally relieved by Sir Colin Campbell on the 17th November, 1857 A.D. There remained out of the original number, when relieved on the 25th September, a total of 979 souls, including sick and wounded, of which 577 were Europeans and 402 were natives.

This concise statement conceals a story of poignant suffering and grim resolve. The women and children, quartered in the vaults and cellars, suffered terribly from the sweltering heat of an Indian summer, from sickness and disease, from shortage of food, and from daily anxiety. Enemy snipers were at places only a few yards from the outposts and kept up an incessant fire. Officers and men could get little

rest, and by night had to repair defences, move guns, and bury the dead. But from the start there was no thought of surrender. The garrison was pervaded by the devout and fearless spirit of Sir Henry Lawrence, who had foreseen the storm and, as he lay dying, gave detailed instructions for the conduct of the siege. The simple inscription on his tomb in the Residency graveyard, "Here lies Henry Lawrence, who tried to do his duty. May the Lord have mercy on his soul," gives the keynote to his noble character. Every day a fresh wreath is laid upon his grave as a tribute to the memory of an heroic Englishman.

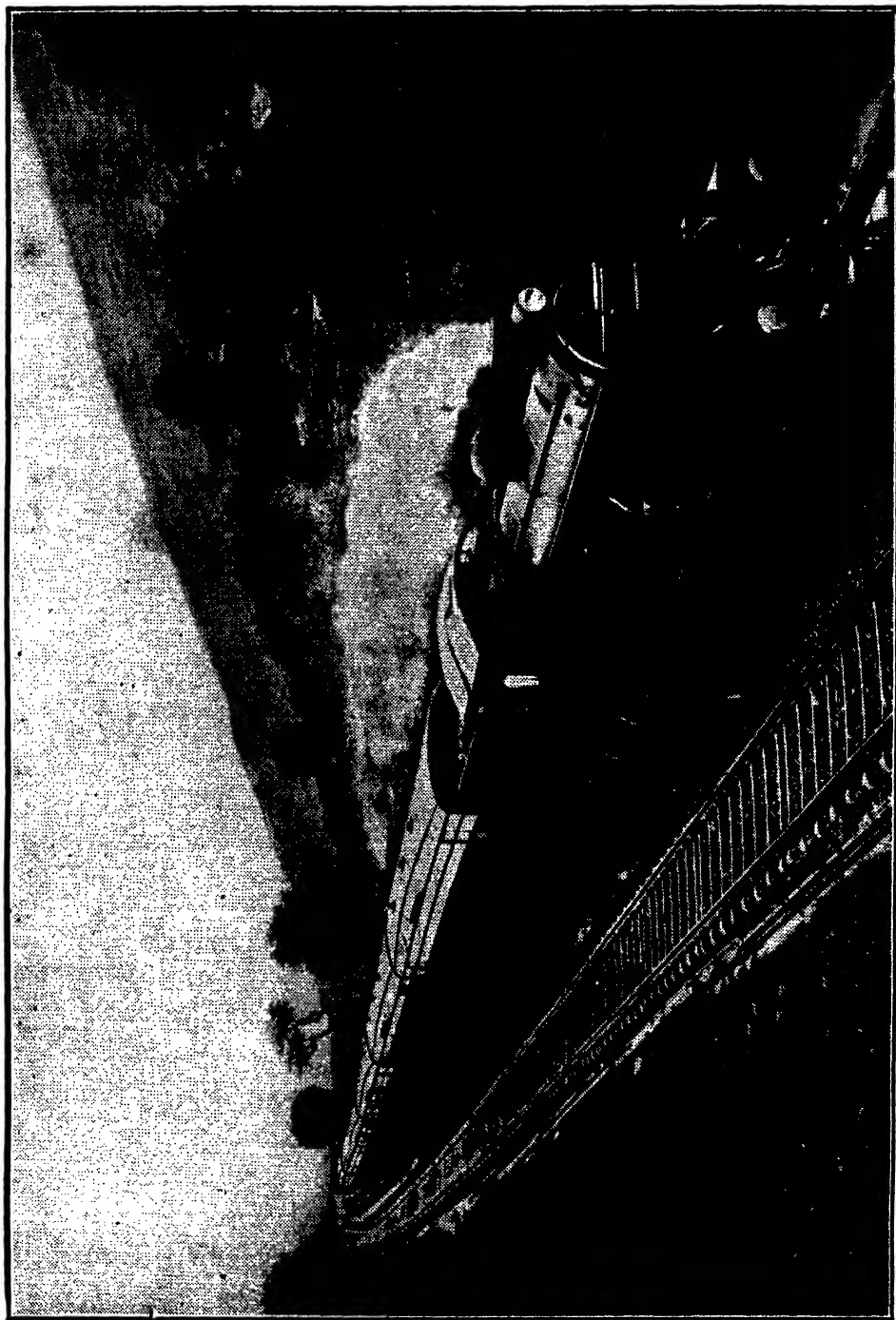
Let us turn for a moment to the relieving force, whose hardships were as great, whose devotion was no less. Havelock had marched to Cawnpore to rescue Wheeler and his little garrison, besieged by the infamous Nana Sahib. Before Havelock could relieve them they accepted a treacherous promise of a safe conduct to Allahabad by river. As they were embarking they were brutally shot down. The women and children who were not then killed were murdered later, shortly before Havelock arrived. After defeating Nana Sahib's forces he began his preparations for the advance on Lucknow to save it from the fate of Cawnpore. It was the worst time of the year for such a campaign. The monsoon was at its height, rivers swollen, the country between Lucknow and Cawnpore, though only fifty miles distant, was infested with rebels, transport was difficult, disease took a heavy toll. But in spite of every difficulty, by August 24 the heavy guns of the relieving force were heard at Lucknow. Three times, however, Havelock had to fall back on Cawnpore, and it was not until a month later that he reached within striking distance after engaging the enemy on numerous occasions between Cawnpore, Unao, and Alambagh, once a country house built for a favourite wife of King Wajid Ali Shah, a few miles from the Residency, which he finally captured from the enemy on September 23. Thence he literally hacked his way through narrow streets in a densely populated area, the enemy in great strength, and, at last, on September 25, effected his entrance into the Residency to find the garrison in desperate straits. He was compelled to remain there to await reinforcements.

The beleaguered garrison, though no longer in danger of massacre or destruction, was in sore plight, and rations, already short, were still more reduced. They had to hold out for another fifty-three days before they were finally relieved by Sir Colin Campbell. His force, advancing from Cawnpore to Alambagh, but without Havelock's extreme difficulties, met with determined opposition at Secundrabagh, a garden

house about one-and-a-half mile from the Residency, but after some stubborn fighting, in which the 93rd Sutherland Highlanders led the attack, they cut their way through; and the historic meeting of Sir Colin, Havelock and Outram took place at the Khursheid Manzil, once a palace, then the messhouse of a British regiment, and now a girls' school, between Secundrabagh and the Residency. The Lucknow garrison was saved. At midnight on November 22 the whole garrison marched out through the Baillie Guard gate and advanced to Dil-kusha, built as a hunting-box by a Nawab-Vizier on the outskirts of Lucknow. Here Havelock died. Worn out by anxiety and disease, he was taken ill on the 20th and did not live to enjoy the honours deservedly showered upon him by a grateful Queen and country. He was buried at Alambagh. From Alambagh the women, children, and sick and wounded were taken to Cawnpore and thence to Allahabad. Outram remained behind at Alambagh.

With the relief of Lucknow the Mutiny was broken, though it was not until the end of 1858 that Lucknow was recaptured and order was finally restored in Oudh and Rohilkhand by Sir Colin Campbell, assisted by Sir Jung Bahadur of Nepal.

To-day the India of the Mutiny seems remote, and one is tempted to think that the breed of the Nicholsons and the Havelocks has become extinct. It is not so. Just as the flag on the Residency at Lucknow still flies, day and night, never furled at sunset, so the shining qualities of leadership do not leave our race. In many a civil district or military command officers are serving who would be equal to any emergency that might test them and would not fall behind the glorious standards of the past. The measure of British success does not lie in the intellectual solution of a complex constitutional puzzle so much as in solid constructive work in the districts where the man of force and personality can still exercise a powerful influence for good over the feelings and affections of the people. The visitor to Delhi, Lucknow, and Cawnpore sees to-day a wonderful advance, and the atrocities and the bitterness of the Mutiny will not be uppermost in his mind. Delhi, again the capital of an empire, with its limitless past, its future full of promise; Lucknow, with its palaces and parks, home of Mohamedan culture, chief city of the Garden of India; Cawnpore, prosperous and enterprising commercial centre, are to him not only permanent memorials of British endurance, gallantry, and achievement, but also tokens of an increasing purpose in our occupation and of encouragement to the India of the future to march steadily forward in partnership with Great Britain.



The Punjab Express on its journey from Bombay to Delhi.

PART VIII

RAILWAYS AND ROADS

CHAPTER I

THE RAILWAYS

By T. GUTHRIE RUSSELL, Chief Commissioner of Railways.

India is a country of great distances. From Bombay, where the fast expresses steam away from the ship's side, to Peshawar, where the camel caravans swing out of sight into the north, is 1,450 miles. Should the traveller fare east he will have to go 1,223 miles before he comes to the Howrah Bridge, across the Hooghly, that is his gateway to Calcutta. Southward from Bombay to Madras, and so to Dhanushkodi (the nearest point to Ceylon), is a distance of about 1,200 miles.

It is to bridge gaps such as these that the railways have flung their network across the country. Seventy-seven years ago, on April 18, 1853, a modest line of twenty-one miles was pushed north-east from Bombay as far as Thana. To-day there are more than 41,500 miles of railway lines in India. No longer do they act merely as feeders to the great ports, taking the produce of India to the sea and returning laden with manufactures from the outside world. Following tradition, taking the historic route through the Khyber Pass, they strike to the borders of Afghanistan; the Nushki extension is a distant link with far-off Persia.

In 1928-29 the railways carried more than 620,000,000 passengers and 85,000,000 tons of goods. It would be easy to quote statistics by the column to explain this bald statement in detail and to show the striking increase on the totals of former years. But if an answer is to be found for the question, "What have the railways done for India?" it is desirable to look at some of the more human aspects of their development.

The efficiency of the railways as carriers, both of the people and of their goods, is shown by the figures for the year. But the railways of India do far more than act as carriers from city to city and from coast to coast. They have acted as a valuable civilizing influence. As in so many other parts of the British Empire, railway lines that originally were thrust into wild and distant places as lines of communication to ensure their peace and safety have long since become recognized trade

routes. In what was originally an essentially agricultural country the railways have stimulated the producer by widening his markets and bringing him within a day's journey of centres that formerly were half a world away. They have broadened the vision of the Indian people by enabling them to visit the seaports—points of contact with the outer world—and distant parts of India that (as folk at home so often forget) are almost as foreign to them as countries oversea. They have made it possible for devout worshippers to undertake their religious pilgrimages in safety and comfort, and in as many days as it once took months. To some extent, at least, it is helping to bridge that formidable gulf between caste and caste which cleaves the country; religious differences are apt to be forgotten for the moment in the intimacies of a crowded railway compartment or the cooperation of the workshop bench.

In one notable field the railways have done enormous service. The several great schemes of irrigation which have turned barren wastes into fertile fields were primarily intended as a first line of defence against the ravages of famine. Without means of transport the new crops would have been as useless in this defence as a new army that had no means of leaving its base camps. The Commission that reported on the disastrous famine of 1878 urged the rapid extension of railways, and for the thirty years before the War an average of 807 miles of new line were opened yearly. The War checked progress, but recent years have seen even speedier development, and no fewer than 1,282 miles were built in the financial year 1928-29. Everywhere, as the irrigation channels have been built, so the rails have followed.

Such are a few of the many services that the railways have given to India. Some of them, no doubt, may be indirect, and neither their extent nor their value may be reduced to the symmetrical columns of an annual report. There is, however, a part played by the railways in the life of India that it is possible to appraise at its true value and to explain by facts and figures. This lies in their important function as employers of labour themselves, and as one of the determining factors in the employment of labour elsewhere.

It is estimated that there are about 807,800 persons directly employed by the various railway systems in India. Of these 788,500 are Indians. So from a numerical point alone the railways, as one of the largest employers in the country, are a great factor in the industrial life of the country. But a question like this cannot be judged merely by weight of numbers. The character of work on the railways is such as to make it a considerable educative force in the ever-present problem of creating

and maintaining a supply of skilled labour. It finds expression in the workshop, on the footplate, in the signal-box, and in the telegraph room.

Few railways in the world can point to so advanced a stage in the education of a skilled staff as will be found in the Railway Staff College which is shortly to be opened at Dehra Dun. Here junior and senior officers will attend courses of instruction in transport work and commercial services, while probationary officers will receive theoretical training alternatively with practical work on railways. The college stands in 155 acres of its own grounds. It includes, in addition to the necessary class-rooms and hostels, a "transportation hall" in which will be a model railway of 2½-in. gauge with thirteen stations and nineteen signal-boxes to be used for demonstration. There will also be a locomotive model room and a railway museum. The system of staff training is to be extended to lower grades, and area schools are to be established for elementary and refresher courses. The fighting Services throughout the Empire have long had their superior staff colleges, but India has led the way in applying the system to railway officials.

The railways are particularly solicitous of their employees' welfare, and the provision of suitable quarters, medical stores, education for their children, and healthy recreation for their spare hours is an important matter in regard to which the men themselves are consulted.

It would be impossible to estimate the hundreds and thousands of men, women, and children who find work all over India in industries which find an outlet for their productions on the railways. There are men employed in the Tata steel works, men hewing teak in the Central Provinces, Tavoy wood in Burma or Pyinma in the far Andamans, that the rolling-stock of the railways may be kept rolling, so far as possible, with the aid of Indian labour and Indian materials. To these must be added a score of minor occupations—employment in the fields producing foodstuffs, employment at the bookstalls selling papers, employment on road transport taking passengers and goods to the rail-head—the list, if continued, would be a long one.

The railways of India are divided into three classes:—

Class I.—Railways with gross earnings of Rs.50 lakhs a year.

Class II.—Railways with gross earnings of less than Rs.50 lakhs, but exceeding Rs.10 lakhs.

Class III.—Railways with gross earnings of Rs.10 lakhs and under.

There are fourteen railways in the first class, and the second and third classes number about forty among them.

To exercise control over so vast and so intricate a system it is obvious that some central authority is necessary, and this is found in the Railway Board. Space does not permit of a detailed history of its transitional stages—the establishment of a State Railway Directorate in 1874; the successors that followed it in various shapes and with various powers; the creation of the first Railway Board in 1905, and so on down to the Acworth Committee of 1921, and the reforms of even more recent years. As at present constituted, the Board consists of a Chief Commissioner of Railways, a Financial Commissioner, and three members, together with a secretary, directors of departments, deputy-directors, and other necessary officers. In brief, the function of the Chief Commissioner and his colleagues, working as a board, may be summarized as follows:—

- (a) They are the directly controlling authority of the State-worked systems, aggregating 18,499 miles.
- (b) They represent the predominant owning partner in other systems aggregating 10,952 miles.
- (c) They are the guarantors of many of the smaller companies.
- (d) They constitute the statutory authority over all railways in India.

That the present system of co-ordination is satisfactory seems to be indicated by the fact that the railways contributed £4,750,000 to general revenue during 1927-28, and nearly £4,000,000 in 1928-29, after paying £3,500,000 and £1,250,000 respectively during these two years into the railway reserve fund.

There is, however, another standard than that of pounds, shillings, and pence. That is to be found in the growing efficiency of the railways, the increasing spirit of cooperation rather than of rivalry all round, and, above all, in the fixed determination of railwaymen to render loyal service to India and to measure the progress of the railways in the progress of the country itself.



CHAPTER 11

RAILWAY ENGINEERING

India is a land of large rivers, high mountains in the north, and long ranges of hills near the sea coast, and the construction of railways has necessitated the carrying out of many important engineering works. The first important work taken in hand was the carrying of the railway from Bombay to Calcutta and Delhi, and to Madras across the Ghats, the low range of hills which enclose Bombay on the north-east and south-east. The first section of the railway from Bombay to Thana was opened in 1853. Preliminary investigations for crossing the Ghats were made in 1847, but owing to the difficulty of the country, the necessity for a careful investigation of the engineering problems to be solved, and the high cost, the contract for the Bhore Ghat on the south-east was not let until the autumn of 1855, and that for the Thal Ghat on the north-east until 1857.

The crossing of the Bhore Ghat involved taking the railway over a height of 2,027ft. above sea level and an actual climb of 1,831ft. in 13½ miles. The hills were precipitous, covered with thick jungle, lacking water and means of approach, and composed of hard trap rock. An enormous mass of heavy work was entailed which took 7½ years to complete. The ruling grade was 1 in 37, with a sharpest curve of 15 chains radius; there were 3,985 yards of tunnelling, with a longest tunnel of 341½ yards, and eight viaducts, the largest 168 yards long and 139ft. high. The crossing of the Thal Ghat also involved many engineering problems and work of greater dimensions, such as two tunnels 490 yards long and one viaduct 250 yards long and 200ft. high, but less in magnitude than the crossing of the Bhore Ghat.

In the construction of the various mountain railways many problems also had to be solved. The Darjeeling-Himalayan Railway, 2ft. gauge, is 51 miles long and rises to a maximum height of 7,000ft. in the first 47½ miles. The steepest grade is 1 in 22½ uncompensated, with short lengths of 1 in 20, and the sharpest curve is 60ft. radius. There are



Intermediate stage in the erection of a steel arch across the Raond Nullah, Kangra Valley Railway, Punjab.

five loops and four reversing stations on this line, which runs through country unsurpassable in its beauty of scenery and with magnificent views of some of the highest peaks in the Himalayas, including Mount Everest. Darjeeling is the summer headquarters of the Bengal Government. The Nilgiri Railway, 3ft. 3 $\frac{3}{8}$ in. gauge, is about 29 miles long, of which the last 12 miles is a rack railway. It runs up to a superb natural plateau of some 900 square miles standing about 7,500ft. above sea level, where is situated Ootacamund, the summer headquarters of the Madras Government. The steepest grade on the adhesion section is 1 in 25, and on the rack section 1 in 12 $\frac{1}{2}$, and the total rise is about 4,550ft. The Kalka-Simla Railway, 2ft. 6in. gauge, is about 60 miles long and connects the plains of Upper India with Simla, the summer headquarters of the Government of India. Simla is situated among the hills of the lower Himalayas at an average height of 7,220ft. The steepest gradient is 1 in 33 uncompensated, and there are 103 tunnels on this line, the length of the longest being 3,752ft. From Simla starts the well-known Hindustan-Tibet road.

Railways on the broad or 5ft. 6in. gauge have also been built in the foothills of the Himalayas, involving the use of steep grades and heavy work. The best known line is probably the Khyber Railway, through the famous Khyber Pass, which was opened for public traffic on November 2, 1925. The total length is about 28 miles and the line is situated entirely outside the administrative border of British India in the strip of tribal territory which separates it from Afghanistan. The steepest gradient is 1 in 25, and the line has been built to the 5ft. 6in. gauge. The hills are bare and rocky and much heavy tunnelling was required, as over 10 per cent. of the whole line consists of tunnels and over 50 per cent. is on a curve.

Another railway which necessitated the overcoming of many engineering difficulties was the Bolan and Sind-Pishin sections between Sibi and Quetta. The steepest grade on the Bolan section is 1 in 25, built to the 5ft. 6in. gauge. On the Sind-Pishin section the railway has been carried for a short length in a tunnel along the side of a rocky hill, and after emerging crosses by a bridge over the well-known Chapper Rift.

Bridging is an art in which Indian engineers have had considerable experience, and many fine bridges and viaducts have been built to carry the railway across the rivers. The longest bridge is probably the Upper Sone Bridge, with a total length of 10,052ft., and including 93 spans of 100ft. It is on the Grand Chord of the East Indian Railway. The Godavri Bridge on the Madras and Southern Mahratta Railway,

5ft. 6in. gauge, has a total length of 9,000ft., and includes 56 spans of 150ft. The Mahanadi Bridge, Bengal-Nagpur Railway, 5ft. 6in. gauge, has a total length of 6,912ft. and includes 64 spans of 100ft. The Hardinge Bridge, Eastern Bengal Railway, 5ft. 6in. gauge, carries a double line over the River Ganges, and has a total length of 5,894ft. It includes 15 spans of 345ft. and the 16 main piers are carried on wells sunk by open dredging to a depth of 150ft. to 160ft. below lowest water level. These are believed to be the deepest foundations of their kind in the world. The Lansdowne Bridge, North Western Railway, 5ft. 6in. gauge, carries a single line over the River Indus at Sukkur. It is a cantilever bridge, consisting of two cantilevers each of 310ft. span and a central suspended span of 200ft.

The Gokteik Viaduct on the Burma Railway, 3ft. 3 $\frac{3}{8}$ in. gauge, has a total length of 2,260ft. The viaduct is erected on steel trestles and the height of the highest trestle is 320ft. The Pamban Viaduct on the South Indian Railway, 3ft. 3 $\frac{3}{8}$ in. gauge, has a total length of 6,739ft. and consists of 144 spans of 40ft., one of 38ft., and one of 200ft., the latter being a Scherzer rolling lift span.

The building of tunnels is also one of the most important duties of an engineer ; but as India in its centre consists of one large plain, the necessity for the building of tunnels does not arise as frequently as in some countries. Many tunnels have, however, had to be built when crossing ranges of hills near the coast and among the foothills of the Himalayas in the north. The longest tunnel is the Khojak Tunnel, 12,870ft. long, on the North Western Railway between Quetta and Chaman, which is situated on the frontier of Baluchistan and Afghanistan.

Engineers in India have also been called upon to design and build many of the works essential in the running of a railway, such as large workshops, head offices for the various larger railway administrations, stations, &c. Two very pleasing examples of these constructions will be seen by the visitor when he lands in Bombay, in the Victoria Terminus Station of the Great Indian Peninsula Railway and the administrative head offices of the Bombay, Baroda and Central India Railway.



CHAPTER III

STANDARDIZATION OF ROLLING STOCK

*By J. M. D. WRENCH, Chief Mechanical Engineer,
Great Indian Peninsula Railway*

At the close of the Great War, India, like almost every other country, was faced with the problem of rehabilitating her railways. During the War everything had been subordinated to the needs of the Empire. Not only had long tracts of railway been dismantled in order to supply permanent way for the requirements of the Army in Mesopotamia, but large quantities of rolling stock had also been requisitioned for the same theatre of war, and railway workshops were utilized for the manufacture of munitions of war. The result was that the stock which was left in India was overworked, repairs had to be neglected, and India found herself with rolling stock which was not only seriously depleted but was also in bad condition. Worse still, she was left with a tired staff—a staff which had worked at high pressure during the whole period of the War with practically no leave or rest. It must also be remembered that so far as India was concerned the War did not end till long after the 1919 trouble in Mesopotamia, and on the frontier continued for nearly two years after the official end of the War.

It was, therefore, not till well on in 1922 that the railways of India were in a position to make a beginning on the immense task of putting their house in order. The problem before them was a big one. The existing workshops were not in a position to overtake the arrears of repairs or the large building programme which was essential if the railways were to meet the needs of trade and the travelling public. Certain of the railway shops were reorganized and put on a sound footing immediately after the War by the introduction of up-to-date labour-saving machinery, the bringing out of experts on workshop practice from home, and the starting of costing branches in the shops. But for the reforms in workshop practice which have revolutionized the mechanical engineering side of Indian railways the main credit

must be given to the workshop committee appointed by the Government of India and presided over by Sir Vincent Raven, late chief mechanical engineer of the North Eastern Railway. New carriage and wagon and locomotive repair shops have been opened at Golden Rock on the South Indian Railway; new carriage and wagon and locomotive shops are shortly to be opened at Perambur on the Madras and Southern Mahratta Railway; and new locomotive shops have just been completed at Dohad on the Bombay, Baroda and Central India Railway.

In addition to these improvements the Government have under consideration the building of new shops at Jhansi on the Great Indian Peninsula Railway; and the complete remodelling of the Jamalpur locomotive shops on the East Indian Railway, and the existing workshops have been completely reorganized and brought up to date both on the production side and in their costing methods. Many small and uneconomical workshops have been closed, enabling all work to be concentrated at one or two places on each railway.

The cost has been heavy, amounting to millions of pounds, but a go-ahead policy has been amply justified. Repairs to rolling stock have been brought up to date, the output of the shops has been doubled and trebled, and the cost of a unit repair reduced in most cases by at least a half. The speeding up of repairs has enabled the railways to get a better "duty" out of their locomotives, carriages, and wagons—"engine miles per engine day" have been largely increased, as have also "net ton miles per wagon day," with the result that it has been possible to delay the purchase of very large quantities of rolling stock. The savings under this head have more than paid for the cost of the reorganization of the workshops. India can now claim that so far as railway workshops are concerned she has little to learn from the rest of the world.

Another problem to which attention was directed immediately after the War was that of standardization—the dream, and at the same time the bugbear, of all railwaymen. Attempts had been made from time to time by different railway administrations to adopt some form of standardization, but little effort had been made to co-ordinate the practice of the different railways—*e.g.*, all the major railways adopted a 4-6-0 type locomotive as their standard for heavy passenger work, certain railways adopted the British Engineering Standards Association design, others with different consulting engineers a similar type but with different motion and different fittings. The result was that though

standardization to the non-technical eye appeared to have been achieved, it was actually as far off as ever.

It was therefore decided that railways should not be allowed to build locomotives and other rolling stock to their own designs, and a committee of Indian railway officials was appointed by the Government of India to go into the whole question. This committee has designed seven different types of locomotives for the broad gauge and the same number of types for the metre gauge. Locomotives of practically all these types are now on the lines, and although there have been minor troubles it can safely be said that all the types have been successful or can be made a success with minor alterations. The new standard locomotives, of course, vary considerably as to type and power. On the broad gauge there are the huge goods locomotive with an axle load of $22\frac{1}{2}$ tons and a tractive effort of 48,000lb., and passenger locomotives for main and branch line traffic, and at the other end of the scale a small locomotive designed to haul two or three coaches but capable of travelling at a high speed. This locomotive is designed for the express purpose of providing fast and frequent services at a minimum operating cost, to compete with motor traffic on the roads. There are already signs that where such services have been introduced the railways can hold their own with their road competitors. The metre gauge has its types similar to those of the broad gauge, but it is not possible within the scope of this article to go into details.

The Standardization Committee has not confined its energies to locomotive design only; coaching underframes of all types, both broad and metre, have been standardized. Designs have been got out for goods wagons for all classes of traffic on both gauges, from the ordinary general service wagon to huge six-wheel bogie wagons with $22\frac{1}{2}$ -ton axle loads. A large number of these wagons are already in service. An interesting feature of these wagons is that they have all been designed so as to be convertible to the use of automatic couplings when the Government of India decide to introduce this form of coupling.

So convinced are the Government of India that standardization is the correct policy to follow, and that the economies to be secured are of the greatest importance, that they propose to set up a permanent department under the Railway Board with the object of maintaining the standards already in force and introducing others as the need arises. This department will not confine itself to rolling stock standards, but proposes to undertake the standardization of all engineering details, including permanent way, girders, &c.



The Vishrant Ghat at Muttra, on the Jumna.

CHAPTER IV

TOURS BY RAILWAY

India calls to every one in whom the spirit of romance is not dead. It is one of the oldest communities in the world, yet in a sense one of the newest. The romance of Asiatic history with its saints and sages and its warrior kings and invading armies—the drums and trampings of a thousand conquests—is revealed at many points; at many others may be read the later romance of England in the East. Life surges past in a picturesque procession. The traveller will hear a medley of strange sounds, the tinkle of the temple bells, the throb of the drum, the chant of the muezzin announcing that God is almighty and Mohamed is his Prophet, the song of a nightingale, the cry of the wild beast in the jungle. The East has a glamour of its own, and perhaps it is found at its best away from cities in scenes and places as yet scarcely touched by modern progress and Western influence, where life is still of arcadian simplicity and wholly Oriental. Or it may be found again among the many wondrous buildings designed by master architects of bygone days where echoes from the vanished centuries ring in the air like distant music.

India offers something of interest and value for every one—for the statesman, a nation in the making, throwing itself with avidity into the latest ideas but yet bound by ancient practices which are of far more importance to many than life itself—for the archæologist, the unfolding of the life and customs of nations long dead in the old cities that are being excavated, such as Taxilla, where Alexander the Great probably rested during his invasion of India—for the sportsman, such sport as few countries can offer: the tiger in the forest, the great mahseer in many rivers, the wily snipe on the jheel, the strong-winged duck, the jinking pig and many another kind—for the tourist, scenes and buildings unlike anything else in the world.

Time was of little value when many of the buildings which we now look at with wonder were built; and many an artist only lived that his

handiwork might do honour to his God. The chapter on "Temples, Mosques, and Palaces," on page 199, shows what a wide choice lies before the tourist. But every visitor to India must see the Taj Mahal at Agra, the monument built by the Emperor Shah Jehan for his beloved Mumtaz Mahal, in which the art of the Moghul period reached its highest expression. It has been aptly described in the following words:

That great Tomb, rising prodigious, still
 Matchless, perfect in form, a miracle
 Of grace, and tenderness, and symmetry,
 Pearl pure against the sapphire of the sky;
 The proud passion of an Emperor's love
 Wrought into living stone, which gleams and soars
 With body of beauty, shining soul and thought,
 So is the Taj.

December, January, and February are the most pleasant months for a visit to India. The days are pleasantly cool and, except on the sea-board, the nights are cold. India, speaking broadly, has no winter except in the far north. It is a land of sunshine and colour. But the traveller coming before November, or staying in the country beyond the month of March, must expect to have the tropical sun asserting its sway unless he wends his way to fair Kashmir or to one of the hill stations of India, such as Simla, the summer capital of India, or Darjeeling the delightful.

Those who contemplate a visit to India often wish to know how long they should remain there. The answer is simple: as long as they possibly can, as none of the time will be wasted. Much can be seen in a month, and a fairly comprehensive tour made in six to eight weeks. Even a fortnight spent in India will, if they land in Bombay, enable them to do a short tour to include Agra and Delhi and back via Lucknow and Benares, or back via some of the delightful cities of Rajputana, such as Jaipur and Udaipur.

Lucknow is a city hallowed by memories of the Mutiny. All visitors go to the Residency and pay homage to the gallant band who held it against terrific odds until relieved by Sir Colin Campbell. Benares, reputed to be the oldest city in India, and certainly one of the most holy for the Hindu, rests on the banks of the Ganges. As the visitor floats down the river in a boat he sees Aurangzeb's Mosque and the many picturesque temples and ghats, and the imagination recalls through the dim vistas of time the endless procession of devout people wending their way down the narrow lanes to the temples with fragrant garlands to hang round the necks of the gods or to wreath in solemn

devotion the emblem of Siva's divinity. Jaipur is the capital of the State of Jaipur, in Rajputana. It is "the rose pink city" where every building is pink or mauve. Here the traveller realizes the India of his dreams and sees the life of an up-to-date Indian State. Udaipur, "The City of Sunrise," owes its principal charm to its situation. It stands on the slope of a low ridge the summit of which is crowned by the Maharana's palace. To the north and west the houses extend to the bank of Pichola Lake. In the middle of the lake stand two island palaces, the Jag Mandir and the Jag Niwas, and the view across the lake, with the dark background of the wooded hills, is one of surpassing beauty. In the palace enclosure buildings of to-day mingle with the buildings of a distant past, and this diversity has a peculiar charm of its own. In the interior of the palace the visitor sees the magnificent East in the peacock mosaics of the Choti Chitra-Shali, the mirror of the Moti Mahal glistening like diamonds, the Chinese and Dutch tiles of Chini-ki-Chitra-Shali, and in the scarlet and gold liveries and brilliant turbans of the attendants.

A month would enable the traveller to include Amritsar, with its Golden Temple; to get a glimpse at the famous Khyber Pass through which invading armies have for centuries entered India; to see Calcutta, the second city in the British Empire; and to visit Darjeeling and see the sun rise over Mount Everest from Tiger Hill. If he arranges to land at Colombo, and leave from Bombay or vice versa, he can include a trip through South India and see its famous temples and the oldest British settlements in India.

Indian railways have now a comprehensive organization to assist the visitor before he sails to plan out his itinerary, to work out his costs, and to help him during his trip in India. The officers in charge of the Indian Railways Information Bureaux at 57, Haymarket, London, S.W.1, and at 342, Madison-avenue, New York, will gladly supply any information required. The address of the Chief Publicity Officer in India is 26, Alipore-road, Delhi, where general information can be obtained. Pamphlets describing many of the interesting places worth visiting have been written and will be sent free on demand. Indian railways publish monthly the *Indian State Railways Magazine*, which retells the story of some of the many places of interest in India, describes the flora of the country and the customs of its inhabitants, the many forms of sport which await the sojourner or the tourist, and gives short accounts of the industries and works for which India is famed.



Crossing the Plain to the Kabul river.

CHAPTER V

TRUNK AND MAIN ROADS

A study of the latest road map of India is sufficient to put an inquirer in possession of the main facts of the road situation in India. The four "through" roads, or, to use the name more familiar to the cars of generations of Englishmen, the trunk roads, stand out boldly. They run fairly closely along the four sides of India, the north, south, east, and west, and total something over 5,000 miles of good metalled and well-bridged highway. There is the trunk road *par excellence*, the Grand Trunk road running without a break from Calcutta to Jamrud at the mouth of the Khyber Pass, and passing through Benares, Allahabad, Lucknow, Delhi, and Lahore, with almost every mile of its route full of historic memories, and—who knows?—crowded at the dark of the moon with the shades of long-disbanded regiments and innumerable wayfarers who travelled and did their business along the road and, all too often, left their bones by its side in the days when the railway was still undreamed of. A still older marching route is represented now by the road from Calcutta to Madras, which skirts the eastern coast of India throughout practically the whole of its length and follows the line along which the old Coast Army moved and fought when the British Empire in India was still in the making. Shorter than either of these two trunk roads, but of hardly less historic interest, are the through routes from Bombay to Delhi passing through Agra, and the route from Bombay to Madras which runs through Poona, Belgaum, and Bangalore.

Inside the rectangle formed by these four great roads there is an intricate network of roads of all kinds, ranging from the well-metalled and, on the whole, well-kept main roads which run from the provincial capitals in all directions throughout the different provinces, the less dependable roads which will carry wheeled traffic, including motor traffic, except when the rains are unduly severe, to the "kacha" or unmetalled roads, which vary from good motor roads in fine weather

to miry or berutted tracks leading from one obscure market town or overgrown village to another.

In fine weather the tourist can get to most of the places which he wants to visit in India by motor, but the district official is still obliged to use a horse or even a camel to visit the greater part of the area in his charge. At the beginning of this year there were approximately 60,000 miles of metalled and surfaced roads in British India and more than twice that length of the various kinds of "kacha" roads. The southern part of the peninsula, south of a line drawn from Bombay through Poona, Hyderabad, and Bezwada, is better provided with roads of all kinds than any other part of India. On the west and north-west there is an immense block of territory consisting of Rajputana, Sind, and the West and South-Western Punjab in which roads, except the most primitive kinds of "kacha" road, are unknown; and there is another great block on the east side of the country comprised within the rectangle of which the corners are Calcutta, Mirzapur, Nagpur, and Bezwada in which roads are largely lacking, except the metalled main roads to some district headquarters.

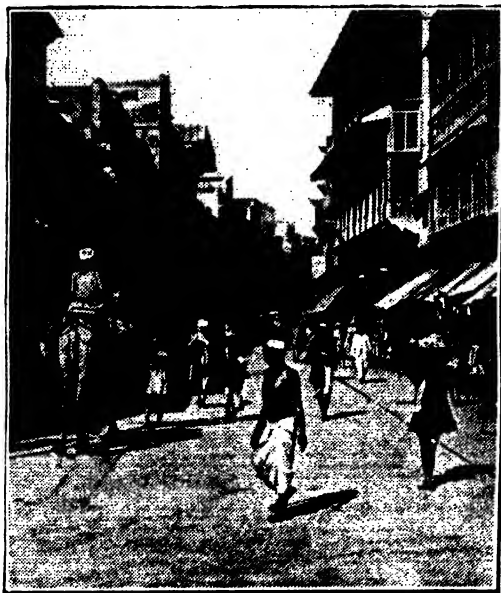
Eastern Bengal, with its intricate system of waterways, is not a good theatre for road construction, and all over India mountains and hills, sandy deserts, innumerable watercourses which during the rains become raging torrents, and other physical difficulties put great obstacles in the way of road construction. Nevertheless, the growth of roads progresses, and a comparison of the existing road system with that of two decades ago will show that progress, though slow, has been maintained.

All over India roads are now the responsibility of the Provincial Governments, and in every province except Assam they are what is technically known as a "transferred subject"—that is, they are in charge of a Minister responsible to the Legislature. Among other things, this means that if the Provincial Legislative Council refuses the Minister's demand for money for the construction or maintenance of roads, a grant cannot be restored by the Governor. During the year 1926-27, including capital expenditure on construction, over 800 lakhs of rupees (about £6,000,000) were spent on the Indian roads. Inside the provinces roads are broadly divided into "provincial roads" and "local roads." The former are kept up by the provincial public works departments and financed from the general revenues of the provinces; the latter by the rural local self-governing units and district councils or district boards. For the most part local roads are maintained by a cess

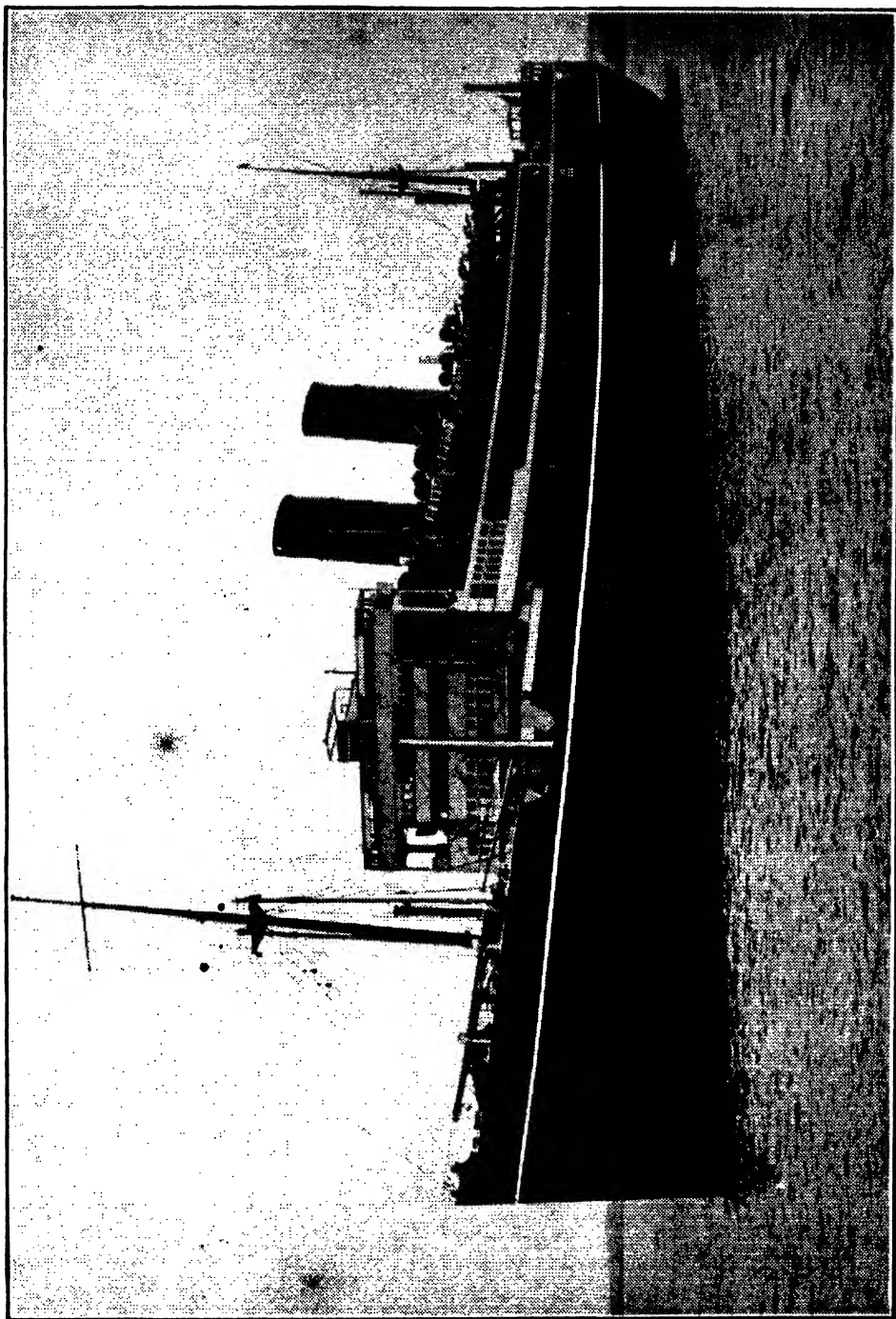
RAILWAYS AND ROADS

on the land revenue, which is paid only by landowners, but sums varying in amount from province to province are paid to the local bodies by the Provincial Governments.

Motor transport has made a comprehensive survey of the road problem imperative. In certain places motor transport is competing seriously with the railway, and the demand for it grows continually. Moreover, the development of motor transport, side by side with the existence of bullock-cart transport, has forced on the authorities the need for considering, first, how they can supersede water-bound macadam roads by other and more resistant highways, and, secondly, how to finance the developments which are now so desirable and necessary. A strong committee was formed by the Government of India two years ago to consider these problems, and its report, which was submitted last year, has already resulted in the imposition of a cess on the duty on motor spirit calculated to bring in 80 lakhs of rupees per annum (about £600,000). A standing committee of the Indian Legislature has also been formed to help in the task of developing a co-ordinated policy of road construction.



Agra.



The P. & O. liner Viceroy of India, 19,700 tons gross.

PART IX

EMPIRE COMMUNICATIONS

CHAPTER I

BRITISH SHIPPING SERVICES

By the EARL OF INCHCAPE, G.C.S.I., G.C.M.G., K.C.I.E., R.N.R.

AN examination of the statistics of the past sixteen years relating to British mercantile shipping and world tonnage reveals that while the former, compared with the pre-War figure, has increased by less than 2,000,000 tons, the world figure at 66,000,000 is 21,000,000 tons above the pre-War level. From this it would appear that Great Britain's percentage increase is much below that of the majority of the maritime nations, and that, as some may deduce, as a shipowning nation her star is declining. That conclusion would, however, be ill-founded. Great Britain's tonnage is slowly but sufficiently expanding; her mercantile fleet is, with the exception of those of Norway and Germany, the youngest in the world, and in equipment is probably second to none. Anyone who follows the record of the British shipping industry must be struck by the accumulating evidence of its vitality and enterprise. Much obsolescent British tonnage is being broken up. New tonnage on the slips in British yards varies in quantity in successive quarters, but the general trend is upwards; and it is for the shipbuilding industry a healthy sign that a substantial proportion of new tonnage is being constructed in British yards for delivery abroad. Added to this, British owners are increasingly taking advantage of some recent innovations—for example, the use of pulverized coal and the harnessing of exhaust steam, both tending to reduce running costs. These processes may be described as the thyroid rejuvenation of the reciprocal engine, and in the increasing use of pulverized coal lies a good hope for our mining industry.

The purpose of this chapter is to examine the genesis and development of British shipping in Indian waters.

A glance at the pages of *The Times* will show that there is a plurality of lines engaged in the carriage of goods and passengers between India and European ports. Chief and earliest of these was that of the P. and O.

Company, which began its operations in 1837 as the Peninsular Steam Navigation Company. In 1840 it was reconstituted by Royal Charter as the Peninsular and Oriental Steam Navigation Company, and four years later extended its mail services to Ceylon, Madras, Calcutta, and other Eastern ports, the carriage of mails to and from Bombay being continued for the time being by the East India Company. In 1854 the Bombay service also passed to the hands of the P. and O. Company, in which it has since remained.

The tale of shipping expansion on the Indian coast is of some interest. It dates back to the arrival in Indian waters at the end of 1825 of the *Enterprise*, a wooden paddle-steamer of 479 tons register, which was immediately purchased by the Indian Government for the carriage of dispatches between Calcutta and Rangoon during the first Burmese war. Other vessels soon found their way to the Calcutta-Burma route; but the system was poorly organized and of doubtful efficiency, so that by the year 1854 a regular mail contract service had become an urgent necessity. It was then that the founders of the firm of Mackinnon, Mackenzie and Co., having without difficulty raised the necessary capital, stepped into the breach and undertook the contract service, which has been carried on uninterruptedly until the present day, first as the Calcutta and Burma Steam Navigation Company, then, as its services were extended to other parts of the Indian coast, as the British India Steam Navigation Company. The company's responsibilities had so far expanded by 1861-62 that it had been necessary to raise additional capital and to augment the company's fleet.

Under renewed contracts with the Government of India a general service of steam communication was then opened up over the whole of the Indian littoral, including a string of ports on the Coromandel and Malabar coasts between Calcutta and Bombay, with extensions to the Persian Gulf on the one hand, on the other to the Straits of Malacca and Singapore. The new contract provided, among other duties, for the conveyance of troops and stores, thereby permitting the Government to effect a great economy by dispensing with several of its transports; it included conditions for a fortnightly steamship service between Calcutta, Akyab, Rangoon, and Moulmein; monthly services respectively to Chittagong and Akyab; to Singapore *via* Rangoon and Moulmein; from Rangoon to the Andaman Islands; from Madras to Rangoon; a fortnightly service from Bombay to Karachi, and a service every sixth week to the Persian Gulf. Incidentally, it committed the company to maintain at all seasons of the year communication with

ports on the coasts of India which up to that time had been considered unapproachable during the stormy monsoons. It had, moreover, been customary to suspend during several months of the year all shipping trade in the Gulf, in some parts of which life and property were insecure, piracy was rampant, and trade hardly known to exist. Under its new contract the company was faced with a difficult and intricate problem of close organization over a widely scattered area, but it is a matter of history that the difficulties were overcome, and it was appropriate that with their widened undertakings successfully accomplished the company's name should be changed, as it then was (1863), to its present form, "British India Steam Navigation Company, Limited." By 1864 the Persian Gulf service had become a monthly one, and the former monthly service between Calcutta and Bombay, *via* ports, had been increased to regular fortnightly frequency.

The British India Company, like the Peninsular and Oriental, successfully faced a difficult period following the opening of the Suez Canal, but very shortly after that event it established a new line between London, Red Sea ports, and the Persian Gulf, with a branch to Portuguese East Africa. The new line opened up to Indian and British enterprise trade centres on the Arabian and African coasts, and on the Red Sea, hitherto almost unknown, at the same time placing these ports in communication with the Persian Gulf. Its damaging effect on the slave trade of the Gulf and the Red Sea had been foreseen, and was countered by local reprisals in the shape of quarantine of such severity as, failing Government protection, to make some parts of the service for the time being impossible.

In 1873, under a fresh contract with the Government of India, nearly all the existing lines were doubled in frequency. It was impossible, once the Suez Canal was opened, that the company's operations should be confined to Indian waters, and the Red Sea-Persian Gulf line was converted into a fortnightly through service between London, Bombay, and Karachi. At the same time were established a twice-weekly service from Bombay to Karachi and the Gulf and a fortnightly service from Bombay to East Africa and Durban. A few years later the company's line between London, Colombo, Madras, and Calcutta was inaugurated, besides lines between India, the Straits Settlements, and Australia.

These various enterprises on and from the Indian coast have continued to the present day, fed by a steadily expanding capital commitment and an ever-increasing fleet of up-to-date vessels. To-day the

company operates, chiefly from Indian ports, 127 ships aggregating 738,712 tons gross, the capital cost of which has run into many millions sterling. It has paid to its shareholders, year in, year out, a modest dividend commensurate with the moderate level of its profits, its credits stand as high as that of any shipping company in the world, and it has, since its inception, continued to serve India's trade with unbroken efficiency.

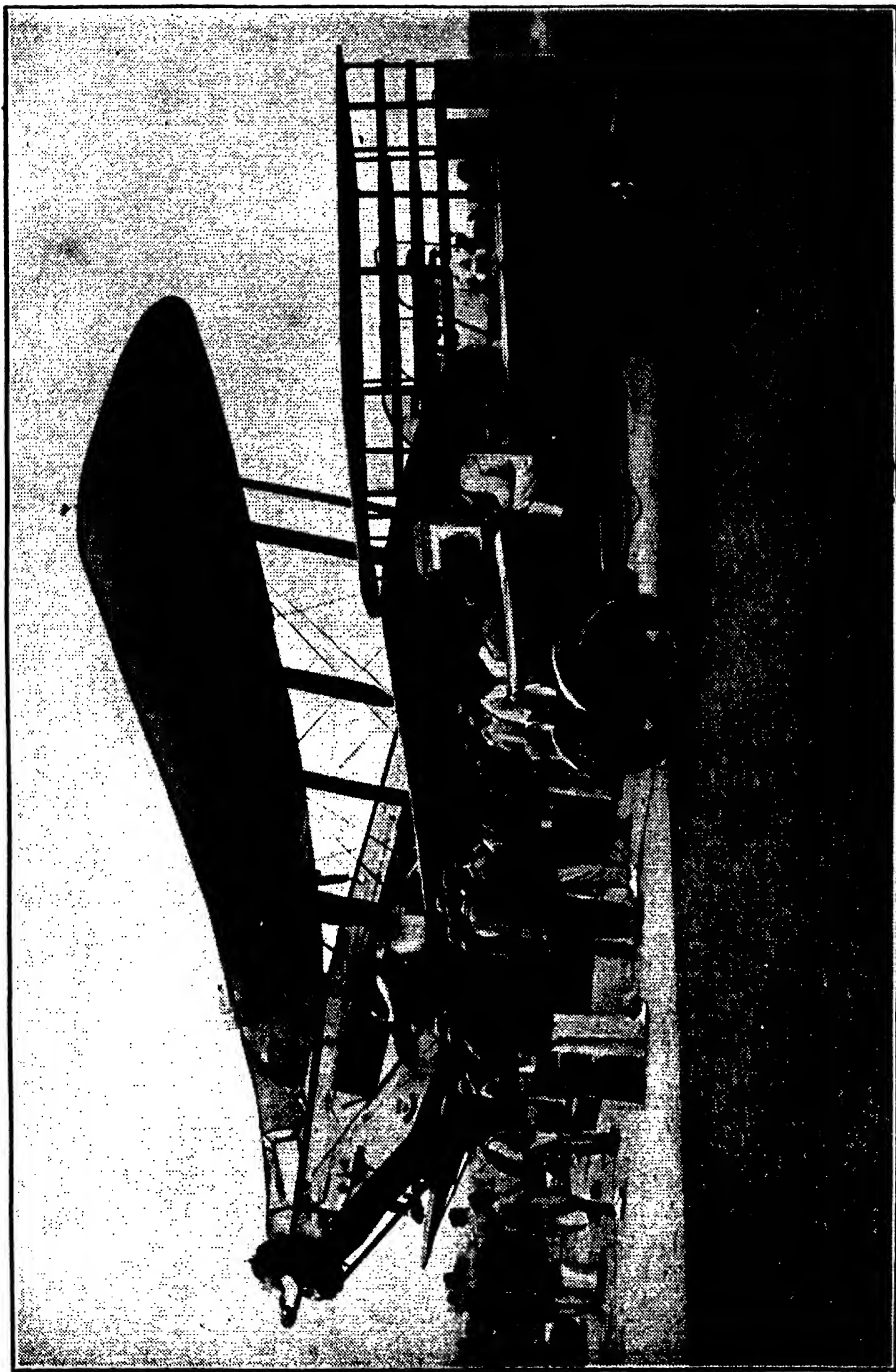
The British India Company, as has been shown, has been the servant of India's coastal trade and oversea commerce during three-quarters of a century; its directors, themselves deeply concerned with the development of India's resources, have at all times provided, in advance of India's needs, a sufficient and effective fleet; and it is no answer to aver that, failing the British India Company, others would have supplied the need, for in all their enterprises the company's promoters were actuated by faith in India's economic future rather than by any prospect of immediate gain. Their faith was well founded, and to-day the company and its subsidiaries can claim that all they undertook to accomplish for the development of coastal transport has, often in the face of difficulties and disappointment, been amply fulfilled.

Shipping is not the only enterprise by means of which British traders, while maintaining solvency in their undertakings, have benefited India. Without British enterprise jute mills, cotton mills, woollen mills, paper mills, tea gardens, coffee plantations, collieries, iron works, banking institutions, insurance companies, and shipping enterprise, in all of which thousands of millions of British capital have been invested, would not exist in India as we know them to-day; and without these and their contributions to her revenue India would have been far short of her present economic condition. In all these things Indians have learned to participate, and if the lately quickened spirit of commercial adventure is to be healthily developed it will not be by a system of expropriation. Rather will that adventurous spirit gather strength by fair competition without resort to the Statute-book. Even if the enactments by which it is desired within a short period to expel the British from India's coasting trade were to become law, it is not improbable that twofold mischief would result, very much to India's economic detriment, for it is easy to believe that Indian monopoly of the coastal trade would produce a rapid deterioration of the services as measured by their present standard of efficiency, and that the resulting disorganization would react to India's loss in a degree impossible to state in arithmetical terms.

If the monopoly of coastal shipping be granted, upon whom among Indians will it be conferred, and to the exclusion of whom? Whence would come the immense capital required? From India, or London, or elsewhere? Evidently it is necessary to envisage a much larger enterprise than that contemplated by the Bill now before the Indian Legislature. The profit derivable by Indians from British undertakings in the East would in no way be lessened by a tolerant cooperation. Team work between producers, merchants, shippers, and shipowners, Indian and British, holds the promise of more general gain than any parochialization of Indian shipping could possibly bring about; and while complete efficiency may, in many departments of life, be attained by Indian talent, it will be to the advantage of India's trade if the owning, manning, and working of ships be left to stand or fall by the test of public service and efficient administration. It is indisputably of the first importance to maintain, unimpaired, communication between the ports of India and between Indian ports and the outer world.



A rope bridge over the Srinagar River, Kashmir.



The first England-India Air Mail machine, The City of Jerusalem, leaving the aerodrome at Karachi on April 7, 1929.

CHAPTER II

THE AIR ROUTE TO INDIA

By SIR PHILIP SASSOON, M.P.

One cannot yet fly to India inside a week, though that will come one day. Meanwhile anyone who can afford a month's holiday can already, at no more expense than may easily be incurred in the course of a month's cruise in the Mediterranean, spend half of the holiday in India and the whole of it most enjoyably.

Go down to Croydon on a Saturday morning. The trip to Paris has long ceased to be an adventure, and will be taken, in all probability, in company with several fellow-passengers who are accustomed to travel to Paris and back by air many times in the course of a year. More than one of them is quite likely to accompany you as far as Basel, where there will be a descent to earth to take the train to Genoa. But that is justified, for night flying is still in the future, and the route across the Alps is not a promising one for night flying in any case. It is better to go under than over, and it is no bad thing to go to sleep in Switzerland and wake up in Italy.

From Genoa the real journey starts, and a sense of adventure is reasonable and proper. The Short Calcutta Flying-boat waits to take you 1,800 miles on your journey; down the coast of Italy and across to Athens, thence past Crete to Tobruk on the coast of Italian Cyrenaica, thence along the northern coast of Africa to Alexandria and Egypt. If you find it the most delightful part of a wholly delightful journey I for one shall not be surprised.

If you have not travelled before in a flying-boat you will be astonished to find what an advance in comfort it represents even over the big London to Paris air-liners. It is as roomy as they are, the petrol is all carried outside the hull, and the engines and the noise are all away up above one's head. Noise is the one drawback to flying, though one gets used to it more easily than is expected. In a big flying-boat after a

very little while one scarcely notices the noise. Then there is the sense of security, due to the knowledge that the boat takes its aerodrome along with it. If anything should chance to go wrong with the engines it is almost always possible to alight safely and easily on the sea.

The Mediterranean is the ideal sea for a journey by flying-boat. The open-water crossings are comparatively short and the coast scenery is varied and delightful. One speeds at 100 miles an hour down the glorious coast of Italy. The spurs of the Apennines run down to the wonderful blue of the sunlit sea. Rapallo flashes by, and a host of other coastal towns and villages as beautiful if less renowned. For a while the mountains draw away from the coast, and Pisa and Leghorn come into view, spread out on the Arno plain. The machine swings over Elba, with the mountains of Corsica, whence her Prisoner came, away in the distant west. Other smaller islands follow, and then, after a while, Ostia, with its seaplanes snugly housed in little docks cut into the Tiber's banks, and Rome itself showing in the distance.

The long line of mountains again draws nearer to the coast, and in a little while one sees the great bulk of Vesuvius smoking behind Naples. It is worth the journey to see Naples from the air and to grasp in one all-embracing view the marvellous combination of island, sea, and mountain in which the town is set.

Capri, that island of delight, is left behind. After skirting for a while a seaboard which is now all spurs and capes and bays, the flying-boat turns inland and for a time flies across a tumbled mass of mountains, tree-clad and with delightful whitewashed villages nestling in the valleys. Then the deep blue of the Ionian Sea reflects the azure of the sky; till Corfu comes into view, with its age-old, twisted olive trees and cascades of wistaria blossom, where once the Kaiser used to visit and a great golden eagle was kept chained to a post by the roadside to do him homage as he motored from the harbour to his palace.

The machine heads south along a coast more broken and mountainous than any yet met with, and turns East at Ithaka to enter the Gulf of Patras. Then it follows the narrow waters of the Gulf of Corinth to the earthquake-ruined town and crosses the Isthmus and Salamis to Athens. I visited Athens on my own journey to India a year ago. To-day it is open to anyone to go through the same wonderful experience himself, flying, as I did, through scenes which by their very beauty make the past live again.

The first half of the next stage, from Athens past the Cyclades to Crete, is scarcely less beautiful. Crete, the home of the Minoan civiliza-

tion, is the natural way to Egypt. You are tracing the stream of civilization backwards to its source, from Greece to Candia and Egypt and from Egypt to the Land of the Two Rivers.

The barren shores of Northern Africa provide a striking contrast to the scenes just left behind and prepare one for the desert. Yet there is pleasure in variety. When you change back into a land machine at Alexandria you will still have a most interesting, if very different, experience before you. As far as Gaza you will follow the immemorial route which linked Egypt and Africa with Palestine and Asia before de Lesseps let the waters of two seas meet across it. Formerly the invasions and immigrations followed the land route, and from the air their traces can still be seen. The mounds which mark the outposts of Egypt or the fortresses of Philistia are already scarred by the excavations of archæologists. Farther on your way, when you have passed the holy cities of Palestine, when you have passed beyond Jordan and embarked upon the long desert route to Baghdad, you will see etched upon the rocky surface of a wilderness of basalt the outlines of older and stranger encampments whose secrets still await the pick and spade.

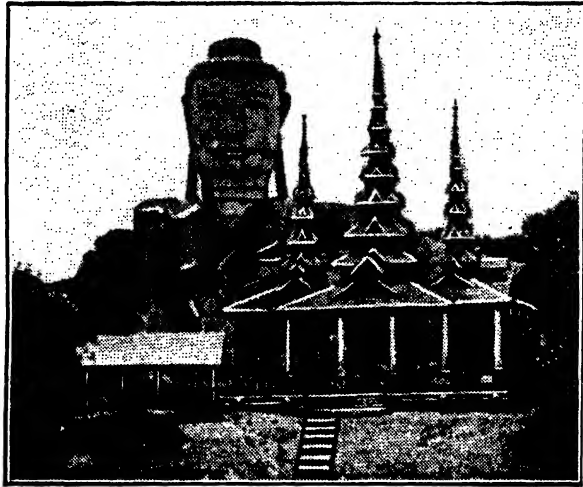
Baghdad is not yet a tourist centre, but its fate is already written. It will inevitably become one very soon. Both in climate and archæological interest it rivals, if it does not surpass, Egypt. It is no farther off to-day than was Egypt in pre-War years. It is now a natural port of call on the air highway to the Far East. If you decide to stop there and go on to India by the following week's machine, you will be doing what many others will do before many years are gone, and you will find the week well spent. Both north and south of Baghdad, at Samarra and Babylon, at Ur and Nineveh, there are a thousand things to see.

Of Babylon and Ur you get a glimpse from the air as you go on your way to India. You will pass over the innumerable date palms of Basrah and startle the pelicans from the head waters of the Persian Gulf. To traverse the savage coastline of the Persian Gulf and of Persian Baluchistan will soon be an undertaking much less dangerous than crossing the one-way traffic at the foot of the Haymarket. The spell which lies upon Jask will have been lifted.

Seven-and-a-half days have brought you to Karachi. Seven-and-a-half days will take you back to London. You have a fortnight for sightseeing in India. When you get back home you will feel that you have been sightseeing, not for a fortnight only, but for a solid month, and that the first and last weeks of your trip have not been the least interesting or the least restful.

INDIA

The journey will not always take seven days. The present service is still largely an experimental one and is capable of much improvement. It is possible that the route itself will be modified and shortened. Better ground organization will not only add to the comfort and safety of passengers, but will make night-flying possible for those to whom time is all important. Machines will be larger and faster. A cruising speed of 150 miles an hour is already fully practicable, if it can be made financially sound. Then there is the airship, which, if slower, travels like a steamship day and night. But the airship is another story.



A shrine at Mandalay.

PART X

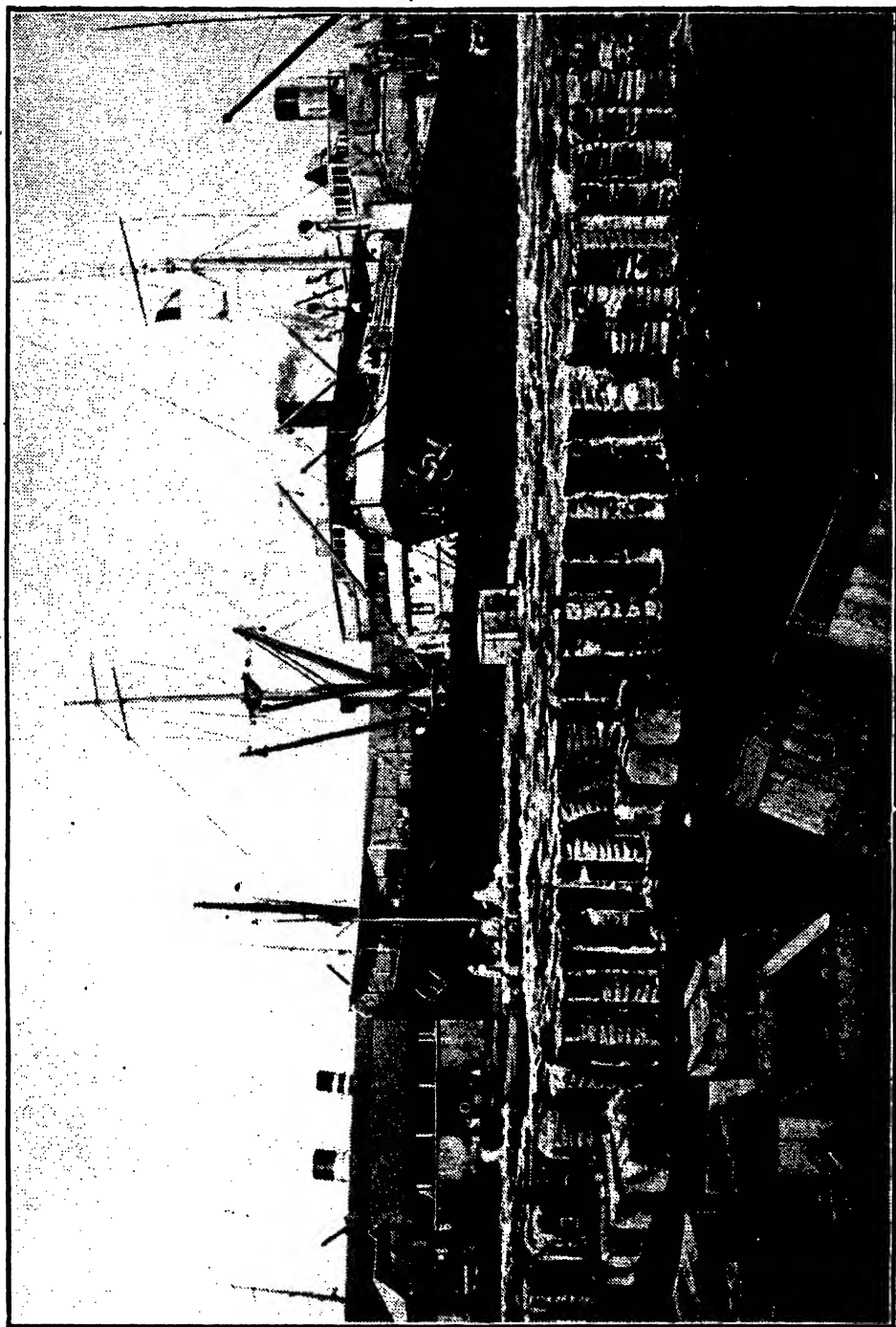
TRADE AND INDUSTRY

CHAPTER I

EXPORT AND IMPORT TRADE

IN the year 1927-28 the exports from India exceeded the imports by about £51,000,000; and it has always been India's happy lot to export more than she imported. From the earliest times, by sea or overland by caravan, she has furnished most of the luxuries of life—her oils, spices, peppers, silks, ivory, and gold—to those able to afford them in the Middle East, in Alexandria, Rome and the cities of the Mediterranean, and throughout Europe. It is not possible here even to summarize the story of the struggle for the control of the Indian trade between the Portuguese, Dutch, French, and British, and of the establishment and growth of the East India Company. Whatever happened, we know of no time when the balance of trade was not in India's favour as against Europe, and as long ago as the seventeenth, and throughout the eighteenth, century the drain of bullion from England to India was a source of genuine uneasiness. India's productivity is enormous, and her potential productivity incalculably greater. Since 1860 the annual value of her imports and exports combined have increased sevenfold, from £60,000,000 to £420,000,000. Every year India receives on the average (though the figure varies greatly from year to year) about £28,000,000 in gold and silver on private account. It is scattered throughout the length and breadth of the land, and is absorbed: turned chiefly into anklets, wristlets, or other jewelry, or simply hoarded. The amount of India's immobilized wealth, if ascertainable, would be astounding, and the handling or touching of it has been the heart's desire of many generations of Finance Members.

Of the 249,84,66,000 rupees (approximately £185,000,000) of imports, cotton and cotton goods easily head the list, furnishing no less than Rs.71,90,16,000 (£53,280,000), or 28.77 per cent. of the whole. Competition for the trade is now extremely keen, and Lancashire no longer holds the predominant position that once she did. In the seventeenth and eighteenth centuries Indian cotton goods and silks were so



Loading bales of cotton in the port of Bombay.

fashionable in England that Parliament passed an Act forbidding the use or wearing of them, for the protection of the home weaving industry. In the nineteenth century industrialized England in its turn flooded the Indian market with goods with which the native hand-looms could not compete. Now there are large cotton mills in India—at Bombay, Ahmedabad, Nagpur, and elsewhere—which have recaptured part of the market. Other countries also are contesting our monopoly, especially in the cheaper grades. Thus Japan, which in 1913-14 furnished only 5 per cent. of what are known as grey goods, in 1927-28 furnished 24.5 per cent. So with woollen goods, of which in recent years, with the increasing prosperity of the people, India has consumed a steadily growing amount. England still holds the lead, but France, Italy, Germany, and Japan all do a substantial part of the trade. India is also taking kindly to artificial silk, and at present the United Kingdom has the bulk of the business. British yarns are preferred on grounds of quality, but in both artificial silk and cotton there is severe competition from a cheaper class of goods from Italy, Switzerland, Germany, Austria, Japan, and Czechoslovakia.

The Indian cotton crop was poor in 1927-28 and the exports were only 2,686,000 bales, but even so, they were higher than the average of the five pre-War years. In 1928-29 the figures improved to 3,711,000 bales, valued at Rs.66 crores. Japan is the best customer by a big margin; in 1927-28 her purchases dropped, owing to the financial stress in Japan and the unsettled conditions in China, but in 1928-29 they increased from Rs.22 crores to Rs.29 crores (£21,500,000).

Under the general description of manufactured cotton piece-goods India sells for export to the extent of about £4,500,000. It would require too much space to discuss here the different classes of goods and the varieties for the different markets. The goods are not suitable for Europe—the old conditions of A.D. 1700 have gone. The best customers are countries in the East; those that bought over £200,000 worth in 1928-29 in order of merit were Straits Settlements, Ceylon, Iraq, Persia, and East Africa. In order to try to increase the exports the Government of India dispatched a Trade Mission some eighteen months ago to survey the prospects of Indian textiles in the markets of the Persian Gulf, the Levant, and East and South Africa. The report is a valuable document, but even were it not too early yet to see its results, labour troubles in Bombay leading to constant strikes have precluded sufficient production from the local mills.

Next to cotton the largest item in the list of imports is metals and

manufactures of iron and steel. The large iron and steel works of the Tata Company are now on a sound footing, turning out structural steel and steel rails to compare in quality and price with the steel of any country in the world, but they can only supply a fraction of India's requirements. They are assisted by a protective import tariff at varying rates, but roughly Rs.30 a ton. There is continuous competition between the United Kingdom, Belgium, and Germany for the balance of India's requirements. The value of the imports of manufactured iron and steel received from these three countries in 1927-28 was: United Kingdom, Rs.14,52,24,000; Belgium, Rs.3,84,49,000; Germany, Rs.1,14,79,000.

The above figure for the United Kingdom is over £10,000,000. It rests with the British manufacturers to endeavour by every possible means to retain this trade; but higher costs of coal, the continuance of heavy overhead charges, and the working of obsolete plants will not do it. The following table shows that the British exporters have been making special efforts, but also indicates that other sources of supply are successfully competing:—

IMPORTS OF IRON AND STEEL, INCLUDING PIG IRON

(In thousands of tons)

				From U.K.	From Germany	From Belgium
1925-26	..	..	..	489	69	229
1926-27	..	..	..	406	79	257
1927-28	..	..	..	685	79	316

India received machinery and millwork to the value of Rs.16,99,00,000 (£12,580,000) in 1927-28, of which Rs.13,30,00,000 (£9,890,000) came from the United Kingdom.

The total imports of plant and rolling stock for railways, excluding steel rails, were valued at Rs.9,35,00,000 (or nearly £7,000,000) in 1927-28, and the shares of the principal countries during four years have been:—

				Percentage of total secured			
				1924-25	1925-26	1926-27	1927-28
United Kingdom	..	..	..	87.0	79.9	61.1	66.8
Australia	..	..	..	—	2.2	4.8	1.9
Belgium	..	..	..	4.1	9.2	17.4	23.9
United States	..	..	..	2.6	2.0	3.9	1.2
Germany	..	..	..	2.5	4.3	6.9	3.9

TRADE AND INDUSTRY

These figures are a tribute to the lively enterprise of Belgium, which country has secured large orders for the Indian railways in open tender against the world for the supply of steel pressed sleepers and their steel fittings, products for which Great Britain at one time had a monopoly.

As a market for motor vehicles India is well worth consideration. The value of imported vehicles in 1927-28 was returned at Rs.6,18,00,000, or about £4,500,000. The English-made car takes third place in the table below, and the United States has ousted Canada from the first place:—

Year	Number of motor-cars imported from			
	U.K.	U.S.	Canada	Italy
1925-26	2,399	4,143	4,775	860
1926-27	2,546	4,030	4,476	1,416
1927-28	3,600	6,031	3,400	1,367
1928-29	3,645	7,943	6,568	967

During the five years after the War, the British manufacturers of cars were unable to look after India's requirements and the United States stood almost alone as the supplier. Also the Government of India in 1923 elected to treat motor-cars as a sinful luxury, to be punished with a 30 per cent. import duty, reduced to 20 per cent. in 1927. Such a penalty acted directly in favour of the cheaper cars from America, but import duty does not explain everything. American and Canadian cars are light, handy, afford good road clearance, and have proved reliable; service by the local agents is also reasonably good. An important development in the Indian motor industry during 1929 was the beginning by an American organization of the first Indian motor-car assembly factory at Bombay. This company has built up a large organization of dealers throughout India, Burma, and Ceylon, and at each of these retail points provision is being made for repairs by qualified workmen and for adequate stocks of spare parts. The English-made cars, more expensive, though possibly better finished, have not satisfactorily fulfilled the conditions required.

The figures for heavy motor vehicles show even worse results for the British makes; out of a total import of 12,800 lorries and omnibuses in 1928-29, only 473 came from the United Kingdom, against 6,370 from Canada and 5,800 from America.

The United Kingdom, however, holds the market for motor-cycles, of which nearly 2,200 were imported in 1927-28, 91 per cent. being from Great Britain.

INDIA

Jute and jute manufactures head the list of exports, their value in 1927-28 being £62,000,000; and the figures for 1928-29 were £2,000,000 higher. The main interest is that in quantities the exports of 1927-28 exceeded the pre-War figures, as shown below:—

	1913-14	1927-28
Jute (in thousands of tons)	768	892
Bags (in millions)	369	463
Jute cloth (in million yards)	1,061	1,553

India holds, through the province of Bengal, almost a monopoly of the raw jute of the world. Other countries have tried to cultivate the plant, but so far without much success. The result is that a large number of jute manufacturing mills have been built along the River Hooghly, up stream and down stream of the city of Calcutta, and for these it is absolutely essential to retain the big share of the world's market for the coarser grades of jute manufactures.

The principal purchasing countries of raw jute in 1928-29, in tons, were:—Germany, 260,000; United Kingdom, 202,000; France, 110,000; United States, 94,000; Italy, 61,000; Belgium, 55,000; Spain, 43,000.

The export of gunny bags of all kinds for 1927, 1928 and 1929 averaged 470,000,000 bags a year, valued at £18,500,000. These are shipped to all parts of the world for grain, cement, sugar, cotton, manures, coal, sand, and many other purposes. Some of the principal countries that bought in 1928-29, and the export values of their purchases, are as follows:—

	Rs. in lakhs	Approx. sterling equivalent
Australia	530	£3,900,000
Java	226	1,670,000
Cuba	217	1,600,000
United Kingdom	206	1,520,000
Chile	143	1,040,000
China	123	910,000
South Africa	116	860,000

The United States does not appear as one of the biggest purchasers because she is the largest importer of sacking and Hessian cloth, from which she makes up her own bags and thereby retains that portion of the labour for her own workpeople. In the same way, the Argentine Republic purchases cloth rather than bags. The value of sacking and

TRADE AND INDUSTRY

gunny cloth exported exceeds that of bags by 33 per cent., the value in 1928-29 being Rs.31,64,00,000, or £23,500,000; the principal consuming countries in that year were:—

—	Rs. in lakhs	Approx. sterling equivalent
United States	1,962	£14,520,000
Argentine Republic	736	5,450,000
Canada	152	1,125,000
United Kingdom	64	470,000
Australia.. .. .	61	450,000
China	42	310,000

Food grains and flour exported from India amount to 2,500,000 tons a year, valued at about £30,000,000. The largest item is rice—2,000,000 tons. Before the War wheat was exported from Karachi and Bombay, 1,000,000 to 1,500,000 tons a year, but the excess production no longer exists. Wheat is consumed by Indians to a far greater extent than formerly, particularly in Upper India; and in 1928-29 it was necessary to import 500,000 tons, mainly from Australia.

The history and growth of the tea trade of India is the greatest romance of all the exports. Seed was originally imported from China, then the shrub was found to be indigenous on the foot-hills of the Himalayas, but the use of well-known China seed prevailed; plantations after plantations were laid out and public companies formed. At the start these were mostly financed with British capital; later on companies with rupee capital followed, and now the number of tea gardens runs into hundreds, and the value of the exports amounts to £25,000,000 a year.

The United Kingdom is the most valuable client, taking 300,000,000lb. a year, as against Canada 11,000,000lb., and the United States of America 7,000,000lb. to 8,000,000lb. The tea industry spends large sums on research work in India for the protection and improvement of crops, and on propaganda in other countries for the enlargement of its markets. In this respect it is the best organized industry in the country.

Full of interest as are many of the other exports from India, space will not permit of reference to all, but it is impossible to pass over ores and metals, which in recent years have become exports of great value. The exports of ore in 1927-28 were 700,000 tons, valued at £1,500,000. The trade is now seriously threatened by the low prices of Russian ore from the Caucasian mountains, where the mines are worked by the Soviet Government. The latter pay their labour in paper, sell their ore

on the Continent at constantly lower rates, and receive payment or credit in terms of sterling. This method of acquiring wealth is easy while it lasts; in the meantime it constitutes a serious threat to the continued exports of manganese ore from India, where the mining costs and transport charges make it almost impossible to compete with the present Russian prices.

India also possesses almost unlimited supplies of high-grade iron ore. From her blast furnaces she turns out over a million tons of pig iron a year, and was able to export in 1928-29 nearly 450,000 tons of pig, of which Japan took 350,000 tons. The day may not be far off when Europe will receive supplies of iron ore, running up to 63 per cent. iron content, direct from India in a continuous stream of special steamers; or as an alternative Europe may have to close down her blast furnaces and import Indian pig iron, as Japan does now. India can meet either event to an unlimited extent because, besides the ore, she has vast resources of coal and limestone suitable for blast furnaces.

We have already seen how great an accumulation of so-called wealth must be taking place in India by the annual inflow of bullion. Yet, whether justified or not, it is evident that the centre of the finance of the world, London, does not at the moment view Indian investments too favourably, and the results of the last Government of India sterling loan seem to imply that India will have to pay more for her money if she has to resort to foreign borrowings. Yet her trade is excellent and her revenue from exports is ever increasing, and will not decrease except for variations caused by the success or failure of the monsoon. Therefore her credit should stand high. She might even become a lending nation; but international credit is slowly built up and is readily wrecked. There are two essentials required for India's financial reputation—namely (1) Continuance of internal and external peace as part of the British Empire; and (2) the mobilization for investment of her surplus gold and silver.

To have an oversea trade valued at £440,000,000, which has grown sevenfold in seventy years, to have a low National Debt mostly invested in productive works, to be able to finance a regular and liberal programme of railway extensions, to be well equipped with ever-growing ports and docks, to hold vast supplies of yet unworked minerals, and to own valuable stores of gold and silver even though hidden, are attributes which should keep India in the forefront of countries entitled to expect the best terms of finance in the world, always provided she has peace and is assured of protection by land and sea.

CHAPTER II

INDUSTRIAL LIFE

Labour in India has been the prey to profitless agitation. But apart from such artificial incitement there has, for at any rate the past ten years, been a genuine unrest among the labour classes, arising from economic causes and from a definite resolve to attain a higher standard of comfort.

The Indian labouring man has for many years groped darkly in this direction. For decades past the labourer has learned to migrate to places where the demand for him is best, and with native shrewdness and growing independence his demand for higher wages has been more insistent. He has not, however, lost his characteristic indolence—partly the effect of climate, partly the fruit of centuries of experience during which he was never able to earn more than a pittance, however hard he worked, partly due to lack of ambition. Consequently, when he has obtained higher rates of pay he has generally utilized them either to maintain his old standards of living with fewer hours of work, or to indulge in pleasures that he would be better without.

The industrial conditions accompanying and following the Great War have changed his former happy-go-lucky methods and imbued his class in town and village with a new spirit. The countryside as well as the town is affected, because the industrial labourer in India is not generally a settled townsman. He still migrates to the big industrial centres only to keep body and soul together when the annual rains fail in his country place, or to earn and save enough to pay off a debt, or to make enough to enable him to return for a delicious spell of indolence in his village. Thousands of labourers of the Arabian Sea coast districts of the southern part of the Bombay Presidency have for many decades made a habit of taking steamer to Bombay for a cold-weather working season in its cotton mills or on public works, and of returning to their villages before the summer rainy season. The Bengal coalfields largely depend on migratory labour, which comes to them from the country-

side and returns to it according to season. The trouble which the migratory habit causes to employers has stimulated measures to discourage it, and the number of people who permanently remain in the industrial centres is growing.

The new factors which the Great War brought into the industrial life of India are described in a monograph on "The State and Industry," written by Mr. A. G. Clow, C.I.E., I.C.S., of the Labour Department of the Government of India, for submission to the Statutory Commission in 1928 and published by Government's orders.

The years immediately following the end of the War [he says] saw a great change. Prices had risen substantially and continued to rise, and as wages rose more slowly the worker found that his real income had diminished. On the other hand, employers in the leading industries were receiving phenomenal profits. At the same time the expansion of industry resulting from the War had increased the demand for labour. Finally, the ferment of the War had awakened labour in the cities from its accustomed passivity, and it showed a readiness to organize that was previously lacking. All the conditions, therefore, were favourable for a demand for higher wages and better conditions. A few strikes were quickly successful, and the strike leapt into recognition as a powerful weapon; indeed, to many workmen its rapid and almost unvarying success made it seem almost infallible. The result was an epidemic of industrial strife, which first became marked in the winter of 1919-20 and reached a climax in the following winter. And the new attitude of labour was both reflected in and stimulated by the beginnings of a regular trade union movement in 1920.

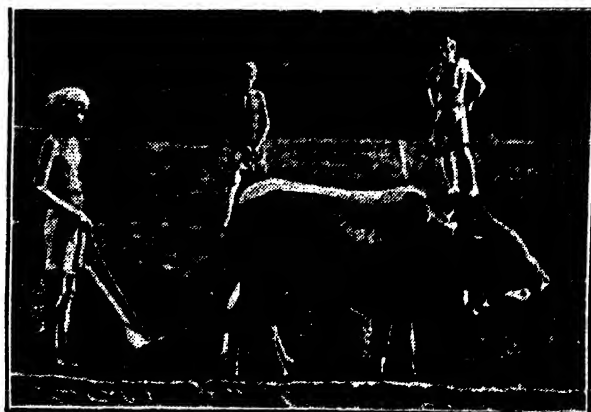
Upon this movement political propagandists and expert organizers practised for revolutionary purposes, while in the Indian Legislature political hostility to Government on general grounds has hindered the Government from taking the legislative steps which they considered urgently necessary to prevent the mischievous exploitation of the ignorant and needy.

The first Factory Act was placed upon the Statute-book in 1881 and the second in 1891. Both were necessitated by the abuse of child labour. They restricted the age at which children might be employed in factories, and the hours during which they might be worked. By the Act of 1922 the minimum age was raised to twelve, and children between the ages of twelve and fifteen are not permitted to work in a factory for more than six hours a day. But meanwhile public opinion was being stirred in the direction of the measures made desirable by the growth of industrialism and the consequent need to protect the workpeople. Thus, in March, 1920, the Bombay millowners memorialized the Viceroy asking for the statutory reduction of hours in mills throughout India from twelve to ten. The Government of India

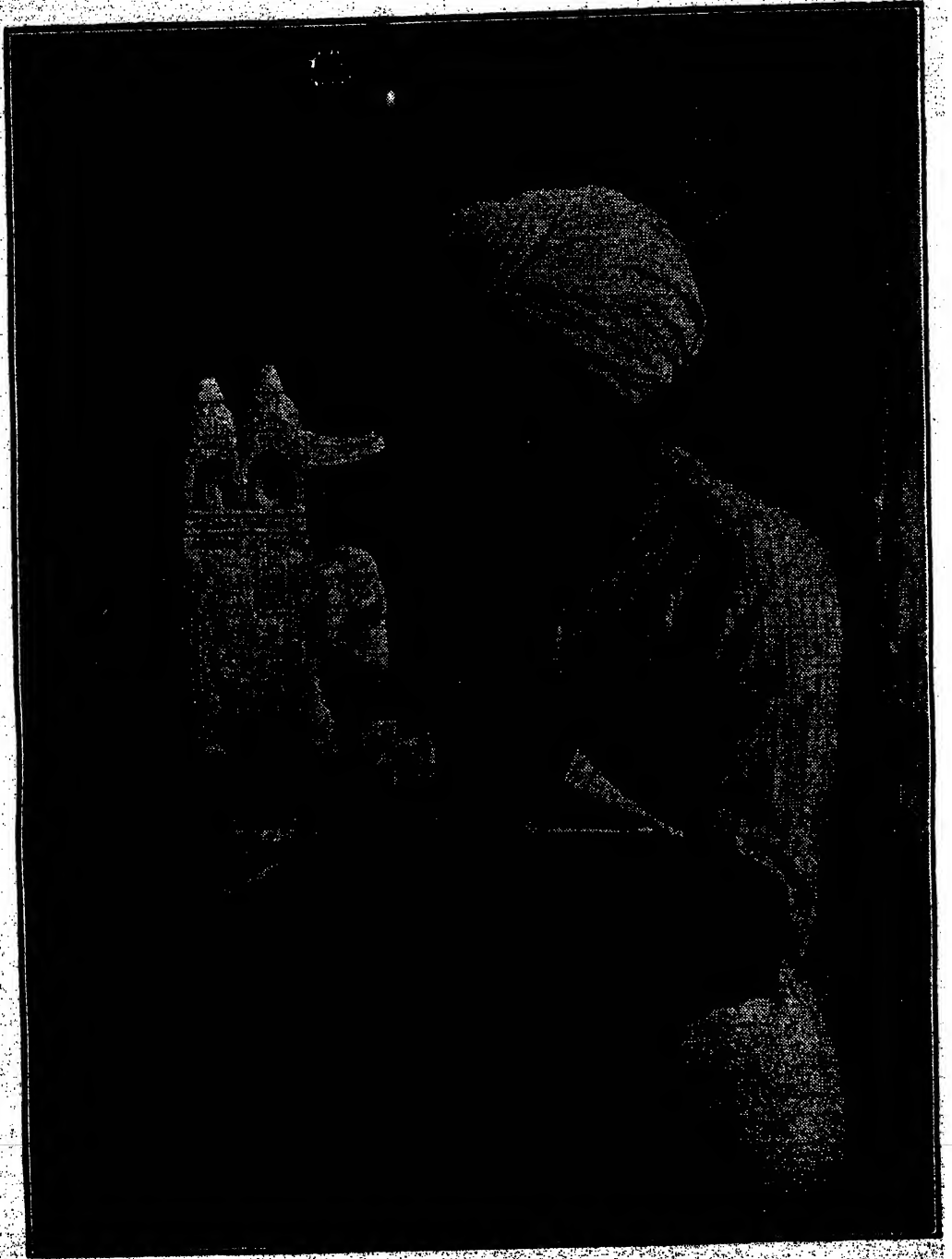
TRADE AND INDUSTRY

induced the Secretary of State, in connexion with the Government of India Bill of 1919, to make "the welfare of labour" a central subject. This enabled them to proceed in such matters in conjunction with the Central Legislature, and the arrangement has been fruitful of beneficial enactments.

Among numerous important ameliorative measures which have been placed upon the Statute-book is a Workmen's Compensation Act. Another is a Trade Union Act, which provides for the registration of unions of a proper character, gives them a large measure of protection in cases of industrial disputes, and permits them to maintain funds for political purposes. Labour enjoys under the Reforms Constitution direct representation in the Legislatures by nomination. A subject which was under discussion for several years was the provision by legislation for the investigation and settlement of trade disputes. The Government of India introduced a Bill for the institution of *ad hoc* Courts of Inquiry and Boards of Conciliation, and it was passed into law in April, 1929. Proposals have been made for amending the Workmen's Compensation Act, for securing prompt payment of wages, for the limitation of fines by employers, for amending the law relating to immigrant recruited labour in Assam tea gardens, for the provision of a system of sickness insurance, and for securing a minimum wage. These proposals have not yet been embodied in a legislative measure. The Viceroy early in 1929 appointed a Royal Commission, which is inquiring into the existing conditions of labour in industrial undertakings and plantations in British India, on the health, efficiency, and standard of living of the workers, and on the relations between employers and employed.



Ploughing.



An ivory carver of Bombay.

CHAPTER III

NATIVE ARTS AND CRAFTS

There can surely be very few people in England who have not seen some specimens of the work of Indian craftsmen, either in the shape of brass-ware, plain or figured, inlaid woodwork, lacquer work, embroideries, and so on. And it is impossible to look at these things without realizing that they represent a high degree of manual skill and industrial traditions of considerable antiquity.

All over India to-day we find craftsmen plying their ancient trades in brass, iron, ivory, gold, silver, woodwork, and textiles. Every province in the country has some distinctive form of handicraft to show, and specimens are readily bought, not only by Indians or by European residents in India, but by visitors and by the people of countries where business enterprise has established traffic in Indian hand-made goods.

The most important of the Indian native industries are textile and, primarily, cotton manufactures. The old muslins of Dacca are world-famous, and the practical disappearance of this once-thriving industry is one of the tragedies of the introduction of machinery. Only a few weavers still make the Dacca muslin, but they are all old men, and it may be anticipated that before very long the industry will be extinct.

It is impossible to give even a partial catalogue of the many specialties of the existing native cotton industry in India, but the delicate and beautifully coloured fabrics for women's clothing which have for centuries been manufactured in certain places in the Bombay Presidency, in Nagpur, and in some of the cities of the United Provinces, notably Benares, cannot be passed over without mention. Weaving is to this day the most important of all the native industries of India. Every village of any size has its own weavers, who make a good deal of the coarser cloth required by the villagers. Some of the most important and valuable work now being done by the Provincial Departments of Industries is in connexion with the native cotton industry. The villagers



A Hindu brassworker of Benares.

are introduced to improved appliances, and they are taught new and better methods of work.

Silk-weaving is a growing village industry in India. Bengal, Assam, the United Provinces, and Bombay are all seats of a more or less thriving silk industry, and in this connexion, too, the Provincial Departments of Industries are taking interest in silkworm breeding and in the production of raw material. At present, however, silk-weavers obtain most of their raw material from China.

Indigenous metal industries are legion. The brass work of Benares and its district finds occupation for thousands of craftsmen and their families. In the Western Punjab, in Bombay, Bengal, and other parts of India various local specialities are encountered, such as enamelled and inlaid metal work, and cast or wrought metal. The brass and iron wares of Kathiawar and Mysore are well known, and there is hardly any corner of the country which has not its own form of metal work, much of which would find a ready sale outside India if the cost of transport were not prohibitive.

The ivory work of Delhi, Jaipur, and other places, the wood-carving of Central and Southern India, the artistic leather work of the Punjab, Madras, Jaipur, and Hyderabad, the gold brocades of Benares and other places, the carpets of Central India and the United Provinces, the gold and silver wire embroidery of Lucknow and certain places in Southern India, and a whole host of other artistic industries can only be mentioned. Lacquer work is a characteristic work of Indian artists and craftsmen and flourishes throughout India, but notably in certain places on the North-West Frontier, in the Central Punjab, and in Rajputana.

In many parts of India pottery has branched out into a number of artistic forms, and the painted potteries of Peshawar and certain places in the Punjab are famous. In brief, the Indian native industries absorb far more workers than do the big factory industries, and there is good reason for believing and hoping that the factory will not swallow up the cottage in India as it has done in so many other countries.





Lord Irwin, the Viceroy, and the Maharajah Kumar, the guests of the Maharajah of Mysore (left), with a tiger shot by the Maharajah Kumar.

PART XI

SPORT

CHAPTER I

SHIKAR

By the late LIEUT.-COLONEL J. G. FAUNTHORPE, C.B.E., M.C.

It is interesting to speculate why so many quite bright lads used to enter Government service in India. In some cases they had a hereditary tendency that way. There were many families whose members served in India for generations, families such as the Boileaus, Rivett-Carnacs, and many others. The certainty of a living wage and a pension appealed to some; but I think that the prospect of plentiful and cheap Shikar was in very many cases the deciding factor.

Shikar in India may be divided into three classes—(1) Rifle Shikar; (2) Shot-gun Shikar; (3) Pig-sticking. And the greatest of these is pig-sticking. Space forbids me to enter into a dissertation on the chase of the pig, which fortunately is a very prolific animal. Inquirers can find ample information on the subject in General Wardrop's book "Modern Pig-sticking," and in the "Hoghunters' Annual." To the above three classes of Shikar must now be added photography, and I am glad to say that several Forest officers and others are following the lead of Mr. F. W. Champion, of the Forest Department, whose methods are described in a well-illustrated book, "With Camera in Tigerland." Photographing wild life is much more difficult and therefore more attractive than destroying it. I speak with some experience.

Having been for the last six winters very largely engaged in the collection of groups of the animals of the plains of India and Burma for the American Museum of Natural History, in collaboration with Mr. Arthur Vernay, of London and New York, who generously financed the enterprise, I have perhaps seen more of the game of India than has fallen to the lot of many. The collection, which is now complete, includes pairs of the largest animals—elephant, rhinoceros, buffalo, and bison—and family groups of the others. It is easy enough to shoot the big animals. Your trouble begins with the skinning, preservation, and transport of skins and skeletons.

The elephant is in no danger of extinction in India at present. He is everywhere preserved both in territory under the British Government and in the domains of the Indian chiefs. The ordinary visitor is not likely to be able to shoot an elephant except in the case of a solitary male who has been "proclaimed" for killing people and doing serious damage in other ways. This frequently happens in Mysore and in the neighbouring British districts.

The rhinoceros is now very rare. The rhino of India proper is the great Indian one-horned rhinoceros (*Rhino unicornis*), which now, I think, survives only in British India in parts of Assam. In Nepal, however, they are abundant, because strictly preserved in certain restricted localities such as the Gandak Valley and the country lying immediately east of it in the Nepal Tarai. This is the largest rhinoceros in the world and stands $17\frac{1}{2}$ hands or more at the withers, much bigger than either of the African rhinos, though with smaller horns. They are harmless and stupid animals but an interesting survival, and to Maharajah Sir Chandra Shamsheer Jang are due the thanks of all interested in natural history for preserving them. The Rhinoceros Sondaicus, the small one-horned variety, is, I think, now extinct in India. A few possibly may still survive in Burma, but a special expedition made by Vernay and a Forest officer to the Tenasserim coast led to the belief that the few traces of rhino there were not those of the Sondaicus but of the third variety of Oriental rhino, the Sumatrensis, which, though rare, was obtained in Burma.

Buffaloes are now very rare. They used to be fairly plentiful in parts of the Central Provinces and in Bengal, but were recklessly shot, and the Central Provinces herds contracted rinderpest in the severe famine of 1896-97. The mortality among the bison herds was so high that it is only in recent years that they have recovered. Bison can be obtained by a visitor in several Forest Divisions in the Central Provinces, and they are fairly plentiful in the hills of Southern India and in Burma, which is also the home of the Tsine or Banteng, a smaller animal of the ox tribe who lives in rather more open and lower lying country than the bison or gaur proper. They are more active than the bison and far harder to stalk. All these animals are dangerous when wounded.

The larger carnivora are the lion, the tiger, the panther or leopard, and the cheetah or hunting leopard. Many people are unaware that the Indian lion still survives. This is only in the Gir forest of Kathiawar, an interesting and little known tract of country, a sort of peninsula on the coast north of Bombay. The Gir forest is only about 450 square

miles in area and belongs to the Nawab of Junagarh. Even here the lion was very nearly extinct about thirty years ago, and the salvation from extinction of this very interesting animal is entirely due to the wise measures of protection adopted by the Junagarh Durbar. The Nawab, Sir Mahabat Khan, deserves thanks from all interested in the preservation of disappearing species. He looks quite reasonably on all these lions as his own and is quite annoyed when they stray over into Baroda and other territories and are shot. The reason why the lion has disappeared within about 150 years from large tracts of country in Central, Western, and North-Western India has by some authorities been stated to be the spread of the tiger, a more powerful animal, who would, I have no doubt, kill a lion if he got a chance, just as he will kill a leopard whenever opportunity offers. There seems to be some ground for this belief, especially as no tiger has ever been known in Kathiawar, but I am inclined to think that the chief reason is the progressive desiccation of large tracts of country formerly inhabited by the lion. My old friend Dunbar Brander, whose book, "Big Game in Central India," is the best produced in recent times, tells me that he believes in this desiccation theory, to which he also ascribes the widespread and rapid disappearance of the cheetah and the great diminution in the number of wolves (who are vermin, anyhow) in parts of the Central Provinces which he knew well for many years as a Forest officer. The Indian lion in habits appears to resemble very closely the African lion. They go about in packs, six or seven together being quite commonly seen (we twice saw seven and once six together), and will lie out in the open under a few stunted trees giving practically no shade in the hottest sun.

There are plenty of tigers left in India. The Forest Divisions bordering on Nepal get their supply of tigers replenished from Nepal, and tigers are more abundant now than they were twenty years ago. In many districts in the Central Provinces and in lower Kumaun the tiger breeds freely in the low hills. Some districts get their supplies from Indian States on their borders, and there are many Indian States—Gwalior, Sirguja, and Rewah, to mention only a few—where tigers are still quite numerous. They are, of course, preserved by the rulers of these States. The ordinary visitor, unless armed with influential letters of introduction, is not likely to be invited to shoot in these States or in Nepal. Tiger-shooting in the dense sal forests of Northern India is very difficult because nowadays it is so hard to borrow or hire elephants, and without elephants little can be done. It is almost impossible to get about on foot in these jungles. For a novice the best method

is to apply for a block of Government forest in the Central Provinces or farther south where one can work on foot, and where the local villagers are glad, for a consideration, to serve as beaters. On this subject Colonel Stewart's recent book is a good one for novices.

The leopard or panther is fairly plentiful all over India where there is suitable cover for him to live in and a supply of food. He can live on game, including peafowl and jackals, and is frequently found hanging around villages and living on their goats, calves, and dogs. He does not mind whether he lives in the heaviest sal forest or in a rocky hill, a patch of grass or a sugar-cane field, or in the tamarisk jungles on the larger rivers. He is a nasty, sneaking animal and frequently turns man-eater. He has none of the shyness and instinctive fear of human beings shown by the tiger. He will come into a house or tent and seize a dog, and take a goat or sheep away from the middle of a camp with fires all round. In the lower Himalayas there have been notorious man-killing leopards who terrorized whole tracts of country, and I believe that in the Central Provinces, where man-eating tigers are far more common than in Northern India, the tiger often gets the credit of human kills which have really been done by the leopard. A leopard can generally be shot in the neighbourhood of any hill station by tying up a few goats in suitable places and sitting over the remains when killed. Leopards are sometimes ridden down and speared, but this is not a very healthy amusement and may result in bad blood poisoning.

Under the head "carnivora" that interesting animal the wild dog should be mentioned. It is one of the most difficult animals to shoot, as it is rarely seen except by chance. They run in packs varying in size from four or five to twenty or more. They are not true dogs, being more akin to the fox and the jackal than to the dog or wolf. They are most destructive to game and will run down any deer, apparently preferring the sambar. A big pack will clear out all the game for ten miles round. The jungle people say that they will even attack a tiger, and there is evidence to confirm this theory; I know that they will pursue and kill a leopard.

The sambar is the biggest deer, and the nilgai (generally called the blue bull) the biggest antelope. Next comes the swamp deer, found in a few districts of the Central Provinces, Northern Bengal, and Assam, and in the swamps near the Nepal border in the northern districts of the United Provinces and Oudh. The best-known preserve for these animals is that owned by the Maharani of Khairigarh. There are also the beautiful spotted or axis deer, still in places fairly plentiful in the

reserved forests of Central, Northern, and Southern India; the thamin or brow-antlered deer of Burma, sadly reduced in numbers by poaching; the para or hog deer, the barking deer, the four-horned antelope, the tiny mouse deer, the Indian antelope or black buck, and the chinkara or Indian gazelle. The number of Indian antelope and gazelle has also been diminished, but they can still be seen in plenty in the domains of some Indian chiefs, notably Bikanir, Alwar, and Bhurtpur. The nilgai still survives because most Hindus will not kill him owing to his supposed resemblance to a cow. The Mohamedans have no such scruples. They consider nilgai meat superior, at any rate, to that of the larger deer.

Small game includes many varieties. The Indian hare is a poor specimen. Perhaps the most sporting bird is the snipe, which visits India from October to March and still may be found in fair numbers on suitable ground all over India; but the non-migratory edible ducks, the spot-bill, and the rare and beautiful pink-headed duck which never was found except in India, and there only in a limited area, have suffered severely from the ravages of the village *shikari*, who pays no attention to close season or anything else. In Oudh the spot-bill duck used to be quite common, but two years ago in a duck shoot on a Rajah's lake in Oudh, in which 300 ducks were shot one day, I could not find a single specimen. The pink-headed duck always was rare and is now extremely difficult to find. The migratory ducks continue to arrive, not perhaps quite as they used to, for I think there is a distinct diminution, at any rate in the mallards, but still they do arrive and may be found in large numbers mainly on large sheets of water, for on the small jhils and ponds they come under the fire of the villager with his recently acquired gun. Many thousands are also netted for the market, but this has been going on for many years.

There are many other non-migratory game birds. The red jungle fowl of Northern and the grey jungle fowl of Southern India (whose spotted hackles are used in most salmon flies) still exist. The swamp (rare and beautiful), the black, the painted and the grey partridge are fast diminishing in the districts, as are the pheasants of the Himalayas. Peafowl, because regarded as sacred birds by Hindus, will survive.

The great Indian bustard has disappeared in the United Provinces and beyond. The Maharajah of Bikanir is preserving the bustard in his State. The florican were always rare, because local, birds. Among the migratory birds one can still get good quail shooting in the spring in a good year. But the best shooting, except snipe, are the Imperial sand-

grouse, which come in two migrations, November and January, to the Bikanir desert and elsewhere, I think from Persia. I consider them much harder to kill than the driven Scotch grouse, because when one in front is shot the rest swoop downwards. There was a big shoot in February, 1929, for the Viceroy, some forty-five guns in all, and we killed over 10,000 in two days. The Maharajah estimated that there were over 150,000 birds, a record number.

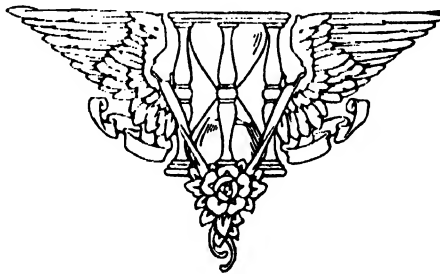
In the Kashmir State there are good game rules which I believe are to some extent enforced. A hard-working visitor might get the Himalayan black bear, Kashmir stag, gural, ibex, and, with luck, markhor and red bear. I hear on good authority that in the British hill districts of Kumaun there is now no game left.

I hesitate to advise on the subject of equipment for trips to India. Tents and furniture can best be obtained in India. As for firearms, a short-time visitor or a junior and impecunious officer in Government service will do well enough with a shot-gun, a heavy rifle, and a high-velocity small bore for antelope, &c. I would emphasize the necessity for a heavy rifle. The small bores (anything under .350) have led to more accidents and to more escapes of wounded animals than is generally realized. I personally consider the .375 *magnum* rifle the best general utility rifle for medium game—*i.e.*, anything smaller than a buffalo or bison. For those to whom expense is no object I would recommend a pair of double hammerless ejector guns, a double .465 hammerless rifle, which is good enough for the largest game, a large-bore magazine rifle and a small-bore magazine rifle. I have found the high-velocity (pointed bullet) .275 Mauser and the high-velocity .30 very good. They are extremely accurate and have a very flat trajectory.

There is one point I have not seen mentioned in the numerous books on Shikar in India which have appeared in the last twenty-five years or so. That is that when following up on foot a wounded tiger or leopard the best weapon to take is an ordinary 12-bore gun loaded with ball and a heavy charge (not less than 3½ drs.) of black powder. I have a theory, based on a certain amount of experience, that a wounded tiger or leopard will not charge home into two barrels of black powder fired into his face at very short range. Following up wounded carnivora on foot has never been one of my favourite amusements, but it has to be done sometimes. If a powerful rifle is used it will not have to be done so often. What the sloth bear would do I do not know, not having had any experience with a charging sloth bear on foot. I think it quite probable he might charge home. In fact, you

never know what a sloth bear will do. I have not mentioned this brute yet. He is widely distributed and is a very nasty-tempered animal, responsible for more deaths and wounds of harmless workers in the forests than any other animal. I am fairly confident that the wild boar would charge home; I have seen one, unwounded, hurl himself on a line of elephants. One does not shoot pig, of course, as a rule.

The Society for the Preservation of the Fauna of the Empire have recently been making inquiries about the rapid diminution of game in India. In most places their efforts, if any are made, will be too late. The game has gone. Even now it is practically only in the Government reserved forests and in the territories of the Indian chiefs (if they preserve game) that any appreciable amount of game can be found. The trouble is the indiscriminate distribution of arms licences. There are game laws, but there is no staff to enforce them and they are practically a dead letter, at any rate in the parts of India with which I am acquainted. There is also no doubt that poaching in the Government forests has been rapidly on the increase, in many places with noticeable results. The Forest rules are good and adequate if enforced, and it is to be hoped that the local Governments will see that they are enforced. It is for the Forest Department and for the Rajahs to say whether there is to be any game left in India.





Pig-sticking, from a drawing by Mr. C. J. Payne ("Snaffles").

CHAPTER II

THE HORSE.

By MICHAEL F. BERRY

India has often been called, not undeservedly, "a sportsman's paradise." Probably the angels in occupation there would sardonically describe it as "a paradise in which sportsmen labour." For India is not a playground--the Englishman goes out there primarily to work. But the sport is available, and, so far as his leisure and his means permit, the Englishman enjoys it. He naturally turns to this purpose any useful features of his daily routine, and chief among these resources is the horse--for in an age of soulless machinery it is refreshing to find that India still regards the horse as a convenience, if not as a necessity. The majority of English people in India are young and active, with traditional English tastes. Consequently they dislike walking, and feel foolish in a rickshaw, but where motoring is impossible they are only too pleased to have the excuse for riding a horse. So in the hills, where the motor-car is still more of an anxiety than an asset, riding continues to be the chief means of travel. In the plains it is a luxury, but a more practical luxury than in England, for the roads are not yet entirely devoted to motor traffic, and there are vast areas of good riding country, so that, apart from sporting considerations, hacking is a most convenient way of securing fresh air and exercise.

In view of these opportunities, and of the Englishman's proverbial love of a good horse, as opposed to a moderate one, it is not surprising to find that pride in horses and horsemanship is one of the principal features of Indian social life. Until the smiling face of our English countryside is changed, no better use could be devised for our light horses than the hunting field. But in India hunting does not, for obvious reasons, occupy such a prominent position. The country available is not exhilarating. At its best it attains the standard of a second-class English plough or open down country--at its worst the horrors

of Dartmoor fail to rival its roughness. In neither case are there any "flying" fences to negotiate, though one may meet a few small irrigation ditches, or low mud walls. The most sporting obstacles are the *nullahs*, which are watercourses, usually dry, with steep banks six or eight feet deep. The hard, dry ground easily lames a horse, and only carries a scent for a couple of hours after daybreak, while the dew is still lying. But the real difficulty lies in maintaining a pack. There is always the menace of rabies, which is rampant among village curs and jackals, and hound breeding is unreliable, being impossible in the heat of the plains and very troublesome in the hills. It is necessary, therefore, to secure frequent drafts from England—an unsatisfactory and expensive system. However, more than a dozen packs manage to surmount these difficulties, and to show wonderfully good sport. Foxes are scarce and are a very feeble imitation of their namesakes in England, so these packs usually hunt the jackal, who forms an excellent substitute. He possesses plenty of stamina, but has not the same initial burst of speed as our fox. Consequently, the country being mainly open, hounds run in view a great deal, and it is then that the pace reveals the imperfections of the drafts. But if the jack secures a good start and has some cover to aid him, there is much good houndwork to be enjoyed. No doubt some of the attraction is due to the associations recalled by the pink coats of the staff and the music of the pack. One could hardly imagine oneself in the Shires, but the calm, easy style of crossing a rough country displayed by some members of the various fields—and notably by his Excellency the Viceroy—indicates that they have forgotten neither the art nor the charm of hunting in the provinces.

Pig-sticking in India corresponds to the best foxhunting in England, in that it is essentially a local product and cannot be enjoyed under the same conditions in any other country. That powerful and stout-hearted fighter—the boar—the rough ground, and the primitive style of the chase produce together an atmosphere of uncultivated hardihood which is typical of the Indian jungle but unique in man's activities. To keep within sight of a fleeting pig by riding at full gallop over the pitfalls of a really wild country and eventually to manœuvre so as to dispatch him with a spear is as formidable a task as one could well devise. Quite apart from horsemanship, pig-sticking probably affords a more complete test of individual courage, endurance, and quick decision than any other sport. Only the huntsman of a pack of foxhounds has the same responsibility for conducting the chase, and he is seldom required to act under such conditions of pace and excitement.

The only drawback to good pig-sticking is the necessarily small field of its supporters, for to enjoy it one must have a sound constitution and an iron nerve. Certainly those who attain the honour of winning the Kadir Cup or, indeed, who secure any distinction in the ranks of pig-stickers will find few situations to excite them and none to appal them in other walks of life.

There is only one game which India can claim to have originated, but among nations who realize the joys of horsemanship it is by common consent the best game of all—polo. In England its merits are fully appreciated, but in India it possesses two other advantages—comparative cheapness and suitable grounds. Under European conditions polo must always be expensive, and that alone prevents it from being more widely played. But in India, mainly owing to low wages, the cost of keeping a pony is approximately halved. Young officers can arrange to lease ponies (colloquially known as “boarders”) from their regiments, and it is often essential, or at any rate convenient, to keep a pony for other reasons already mentioned, so that pleasure is very easily combined with business. But the question of grounds is almost as important. In England long grass makes practice impossible in the average field, and soft ground restricts the available season to the three or four months of summer. In the plains of India comparatively little attention is required to keep the ground level and true; the grass at best is very scanty, and one can play with equal ease all the year round, except actually during the rains. On this account Indian polo is distinguished by such pace and accuracy as to make it, not only for the players but also for the spectators, the most thrilling game imaginable.

The tournaments at Calcutta, Delhi, Meerut, and elsewhere arouse the keenest competition, with a general standard of play which is perhaps unrivalled in any other part of the world. Honours rest largely, as is only natural, with the Indian cavalry regiments, who have greater opportunities for perfecting team work, but the game is by no means confined to the Army. Indeed, it attracts all classes of players and ponies, and not only unites the various sections of the English community, but forms a valuable link with the Indians themselves. The latter produce many excellent teams, thanks largely to the Indian Princes, many of whom are players or active supporters of the game. In the friendly rivalry which naturally ensues the Indians, with their wonderful wrists and eyes, are well able to hold their own—much to the delight of the huge crowds of their countrymen who flock to the

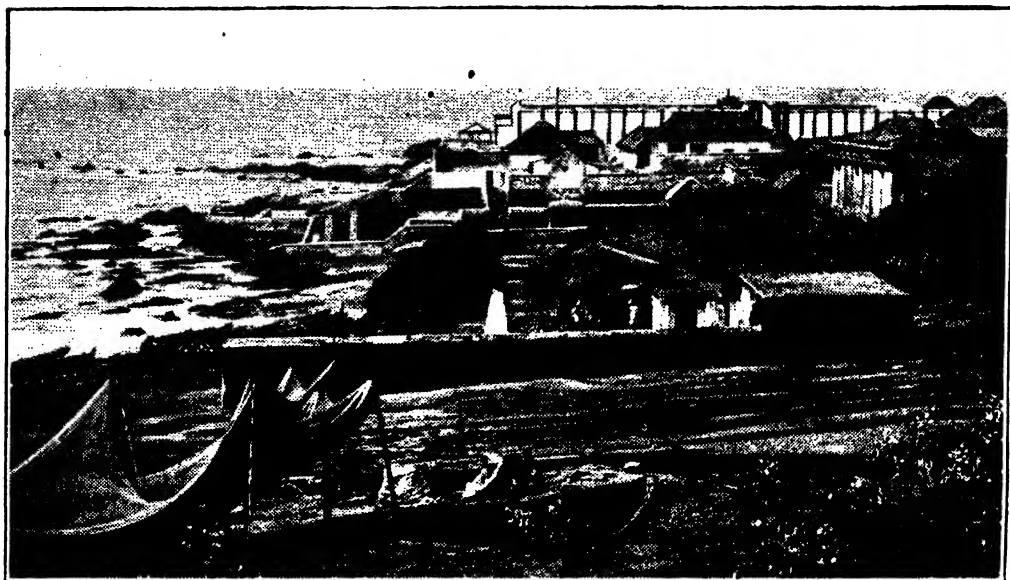
tournaments. The tremendous enthusiasm shown on such occasions indicates that polo is in every sense a national game.

Racing is neither a sport nor a game, but rather a fascinating industry, and it is impossible to describe in a few words its situation in any country. But Indian racing has one special feature which may be mentioned— a close connexion between the amateur and the racecourse. In England our amateur trainers and riders devote themselves almost exclusively to steeplechasing, but owing to the hard ground, which inevitably means lame horses and bad falls, only a very little steeplechasing is carried on in India. Flat race meetings, however, are numerous and varied. The most important are at Calcutta and Bombay, where, thanks to the funds provided by the totalisator, one can move in comfortable surroundings to watch high-class horses competing for valuable stakes. In these two places competition is keen, and the winners are practically all well-bred horses imported from England or Australia. But at Delhi and other “up-country” meetings, where the racing suffers from lack of capital, the atmosphere is less professional and the class is not high, but the lack of quality is compensated by the interest of local trainers and riders. Since these smaller meetings are almost entirely supported by amateurs, the weights can be adjusted to a reasonable level, and any young enthusiast may gain valuable knowledge of the mysteries of riding and training racehorses which he would have great difficulty in obtaining elsewhere.

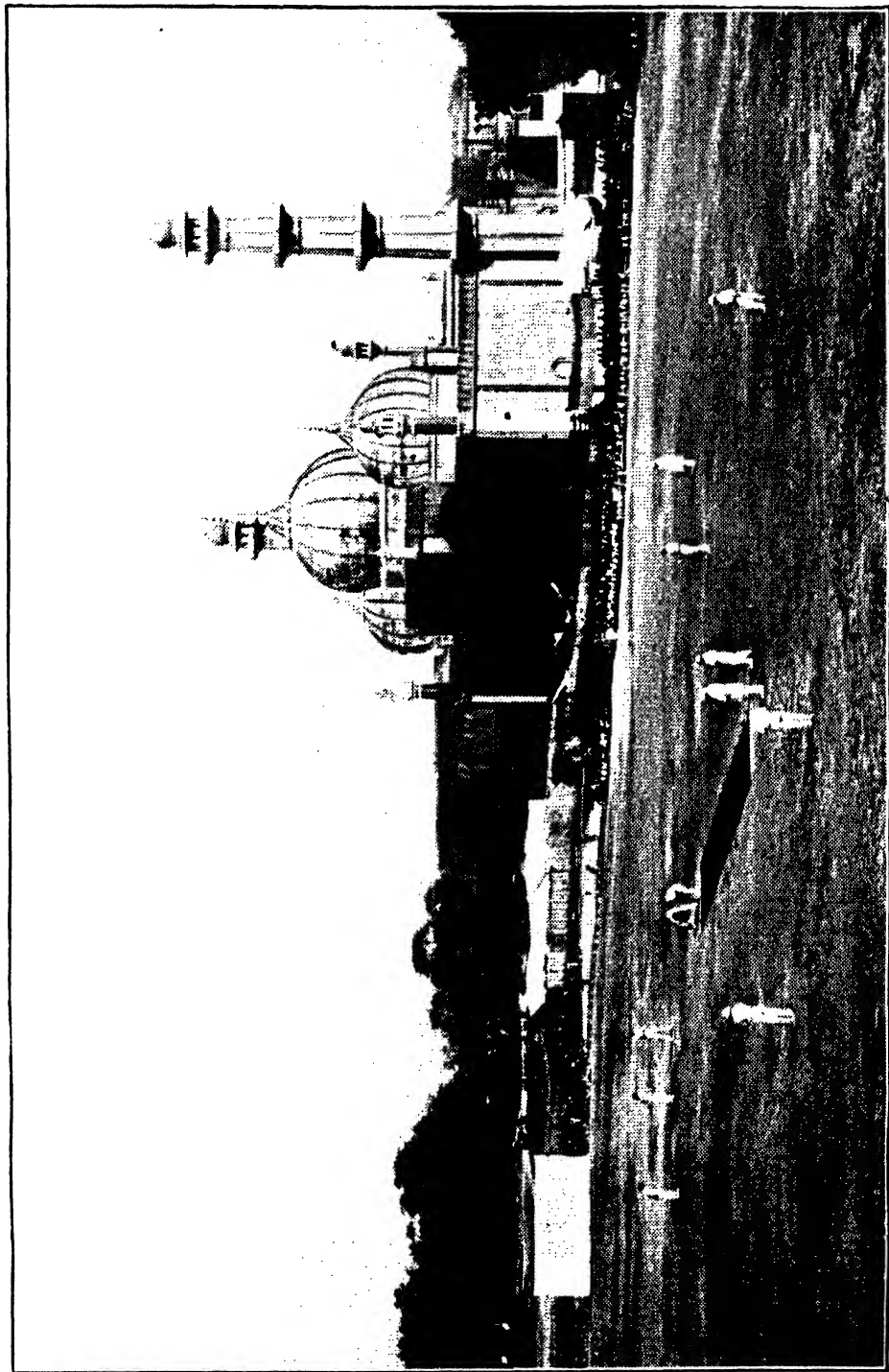
If any proof were needed of the value of the horse to Indian society Delhi Horse Show would supply it. Aided by perfect organization, the strength and quality of the classes cannot fail to impress any visitor. Nowhere else could one see in the ring fifty first-class hacks—kept for the purposes of hacking. The polo ponies, of course, are superb, and, considering the difficulties to be faced, the breeding classes are wonderfully good. For in India, as in other hot climates, purely local strains always deteriorate, and frequent crosses with imported blood are essential if the stock are to possess the necessary substance and constitution. The breeding has made great progress lately, but although the “countrybreds” can win prizes in the ring, and play polo with the best English and Australian ponies, they cannot yet compete with them on the racecourse. In this direction it is hoped to obtain some active assistance from the Government, so that breeders may secure a firm footing. For at present there is no indication that the demand for horses in India will diminish. Naturally it would not be so strong were it not for the presence and enthusiasm of the Army. But apart from that it is

SPORT

certain that for many years to come India will employ at least her present stock of horses, and the same facilities for sport will presumably continue. Those who escape from the mechanical whirl of the modern English town imbued with a natural love of horses will still find there the same wonderful scope for their activities and maintain the reputation of India for an unrivalled standard of sporting talent and horsemanship.



Cape Comorin.



The M.C.C. Team, 1926-27, versus Aligarh University.

CHAPTER III

CRICKET

By W. E. LUCAS

IN the more populous areas of India, near big towns, cricket is enthusiastically practised both on a big scale and on what might be termed a village green scale. In any of the fishing villages near Bombay one is almost certain to find men and boys engaged in cricket. These villages have no village green—possibly only a grassless patch of baked mud where men and boys, naked save for a loin-cloth, bat, bowl and field with a skill and a knowledge of the game that is surprising, and an enthusiasm which shows that the game has a solid foundation. In the higher spheres, of course, the situation is different. All towns of any size have their cricket teams, and in a city such as Bombay there must be hundreds of clubs.

Bombay is the chief centre of cricket in India, and the standard of cricket there is higher than in any other place. Indeed, it might also be said that the Bombay Gymkhana ground is the “Lord’s” of India. It was the Parsis, the descendants of those Iranians who landed at Sanjan on the Guzerat coast 1,200 years ago, who were the first community in India to take a serious interest in cricket. In fact, it was the Parsis who sent the only two teams to England (in 1886 and 1888) before the All-India Team of 1911, and it was the Parsis, first of all the Indian communities, who in 1892 inaugurated a yearly representative match against the Europeans which was the seed from which the present Quadrangular Tournament has sprung.

Bombay was fortunate in having at a time when the spirit of cricket was beginning to stir actively among the Indian communities a Governor, Lord Harris, who was not only a great and enthusiastic cricketer himself, but also had on his staff Colonel Greig, the famous Hampshire player; while recently Sir Leslie Wilson has done a great deal to encourage the game in the Bombay Presidency. It is chiefly for these reasons that the Bombay Quadrangular Tournament is the

biggest cricket festival in the year. The origin of this tournament must be traced back to 1892, when a representative Parsi team first played the Europeans. In 1908 the Hindus joined, and the tournament became a triangular affair until the advent of the Mohamedans in 1912. At first the players for this tournament were chosen entirely from within the confines of the Bombay Presidency, but players from all over India are now invited to play. The Parsis are confined in their choice almost entirely to the City of Bombay, as theirs is a small community which is almost exclusively settled in that part of the country. The Hindus, too, usually put in the field an eleven composed mostly of Bombay or Poona players, not because they have no other choice, but chiefly because up till now the Bombay players have proved themselves to be the best obtainable. The Mohamedans bring the majority of their players from the Punjab and the United Provinces, while the Europeans endeavour to persuade, often with very little success, any good player to come from wherever he may be throughout the length and breadth of India.

Important cricket is not confined to Bombay; there are yearly tournaments in all the big centres, Calcutta, Madras, Secunderabad, Karachi, Delhi, Lahore, and elsewhere, and in all cricket of a very good class is played. It is hard, however, to make an accurate comparison between good cricket in India and in England, as the conditions under which the game is played in the two countries are dissimilar. In India, in the majority of cases, the wickets are hard and fast, and consequently the bowlers have a more difficult and the batsmen a lighter task. Only in Bombay and Madras, and in a lesser degree in Calcutta, where cricket is played during the monsoon, does the batsman meet a real "sticky dog" and the bowler find an accomplice to help him with his tricks. Then, again, the physical strain of batting, bowling, or fielding under the blaze of a midday tropical sun is such that a score of fifty is almost as much an exertion as making a century in England, any long spell of bowling is nearly insupportable, and the fielders suffer from a long outing in the field.

That is in some measure why the M.C.C. team which visited India in the winter of 1926-27 did not fare so well either with bat or ball as they were expected to do in Bombay and Calcutta. That can be said without disparaging the very fine performances of the Indian cricketers in those matches, performances which astonished and pleased all who had played cricket and watched Indian cricketers for many years. The visit of that M.C.C. team was a very important occasion and gave

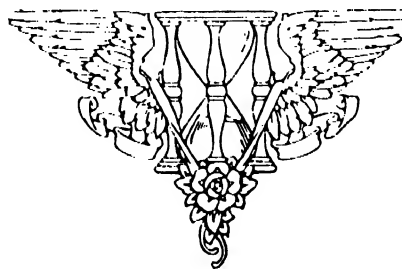
a considerable fillip to the aspirations of Indian cricketers. The visitors were very strong in bowling, including Tate, Geary, Wyatt, Astill, Mercer (who had been one of the most successful county bowlers of the 1926 season), Boyes, A. E. R. Gilligan, F. Brown, and Chichester-Constable, while as batsmen, apart from those already mentioned as bowlers, there were Sandham and Parsons. Against this formidable side the Indian teams in Bombay did exceptionally well, more especially as the majority of them were quite young players who had no experience of bowling of the class which was pitted against them and were naturally nervous at the importance of the occasion.

It is these young players who will form the nucleus of the Indian team which it is proposed to send to England in the near future. The outstanding players among the younger generation are C. K. Naidu and L. P. Jai (Hindus), Nazeer Ali and Wazir Ali (Mohamedans), and S. H. Colah (Parsi), all of whom, except Naidu, who is thirty-four, are well under thirty. Naidu is possibly the most accomplished bat. Well over six feet, he combines a graceful style with quickness of movement. Few people who witnessed it will forget his hurricane reply to G. F. Earle's 120 in the match in Bombay between the Hindus and the M.C.C., when Naidu, in an almost flawless innings, scored 156 runs, mercilessly punishing Tate and hitting eleven balls over the rails. Wazir Ali, too, had the distinction of scoring two consecutive centuries against the M.C.C., one at Delhi and the other at Patiala, while his brother, Nazeer Ali, who is now in England qualifying for Sussex, bowled with marked success. Jai and Colah also scored half-centuries against the M.C.C.

That these players did so well against the M.C.C. shows their true class, for although they make many runs every year in Indian cricket that is no real criterion, because what India needs is real class bowling, due possibly to a lack of scientific coaching. Now that such bowlers as Baloo, Salam-ud-Din, Abdus Salem, Warden, and S. M. Joshi are either too old or have died, there seems to be no one of that calibre, with the possible exception of Nazeer Ali, to take their places. In England in 1911 Baloo took 114 wickets for eighteen runs apiece, and would have done better had he had a better fielding side to back him up. Whether the best bowlers now playing would be successful on English wickets it is difficult to say, but it is obvious that none of them shows any real genius or has what might be called a bowler's brain. What is wanted is good systematic coaching. The spirit is there and the natural ability is abundant, and that is why, on the whole, cricket in

India is of such a good standard. In these days European teams fare very badly at the hands of Indian cricketers, except in the case of Calcutta, and possibly Madras, where there happen to be stationed at the moment cricketers of the first class such as A. L. Hosie, R. B. Lagden, T. C. Longfield, C. P. Johnstone, H. P. Ward, G. E. B. Abell, and, till recently, J. L. Guise.

Any visitor to Bombay during a monsoon Sunday would be amazed at the cricket enthusiasm which covers the maidan for the distance of over a mile with a host of white-flannelled cricketers. Rain is probably intermittent and, when the rain is not cooling the air, the heat is sweltering. Yet thirty matches are in progress and cricket of every variety is being played. That is the case in all the big cities, with the difference that other centres are usually more fortunately situated than Bombay in regard to grounds. The Indian Princes provide the country-house cricket—only country-house cricket run on such liberal lines that the entertainment provided might almost be from the Arabian Nights. The Jam Sahib, of course, is a household name throughout the world of cricket, and the Maharajah of Patiala has a well-deserved reputation as a patron and former exponent of the game. The enthusiasm for cricket is indeed widespread among the Indian Princes, ranging from the Gaekwar of Baroda, the Maharajahs of Jaipur and Indore to the ruling princes of smaller States, such as Limbdi or Dhar. They build beautiful grounds, arrange tournaments, and keep teams of their own. Cricket of the best class costs money; money in India is scarce, and it is very often the liberality of the ruling princes that makes possible many things that otherwise might be impossible.

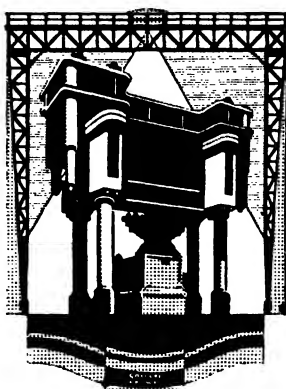


INDEX TO ADVERTISERS



								Page
Asiatic Petroleum Co., Ltd.	..	..	..	..	..	..	..	v
Bird & Co.; F. W. Heilgers & Co.	..	..	..	..	..	..	..	iv
<i>The Blue Peter</i>	..	..	..	..	..	..	..	x
Braithwaite & Co. (India), Ltd.	..	..	..	..	..	..	..	i
Burma Railways	..	..	..	..	..	..	..	xv
East Indian Railway	..	..	..	..	..	..	..	xvi
The Eastern Bank, Ltd.	..	..	..	..	..	..	..	vi
Eastern Bengal Railway	..	..	..	..	..	..	..	xiii
Great Indian Peninsula Railway	..	..	..	..	..	..	..	vi
Indian Railways	..	..	..	..	..	..	..	iii
Mysore	..	..	..	..	..	..	..	viii and ix
North Western Railway	..	..	..	..	..	..	..	vii
P. & O.	..	..	..	..	..	..	..	ii
<i>The Statesman</i>	..	..	..	..	..	..	..	vii
South Indian Railway	..	..	..	..	..	..	..	xiv

1913



1930

BRAITHWAITES *went to* **INDIA**

seventeen years ago. Since then they have established
Bridge and Structural Works in Calcutta and
in Bombay which cover
an area of
FIFTY-SEVEN ACRES

They have executed contracts for Bridges, Docks,
Pipelines, Wharves, and Buildings
to the value of
TEN MILLION POUNDS

They have built 120 bridges and are now constructing
the largest ever made in the East.
The seven spans of the
Hugli Bridge weigh
SEVENTEEN THOUSAND TONS

**MULUND WORKS
BOMBAY**

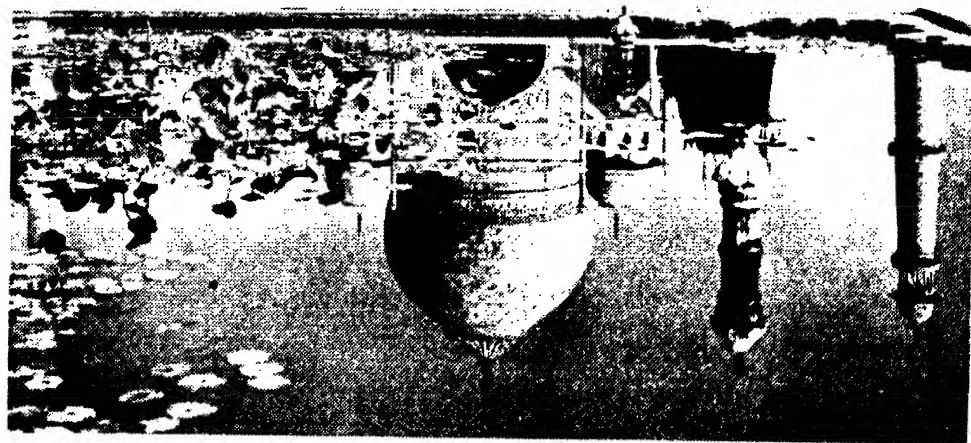
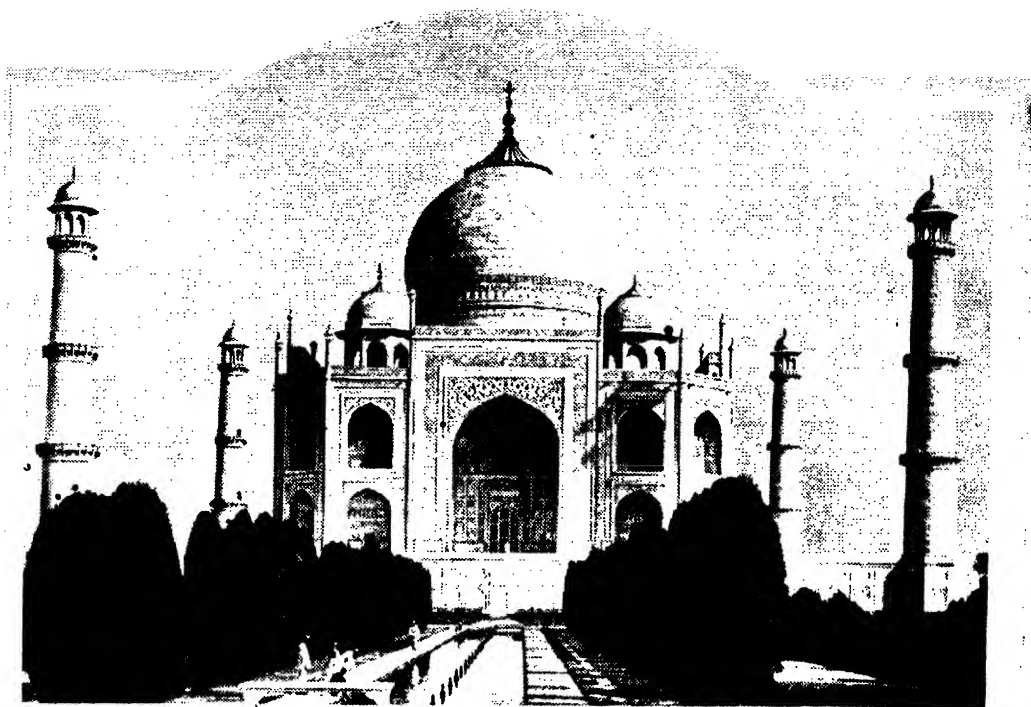
**CLIVE WORKS
CALCUTTA**

BRAITHWAITE & COMPANY (INDIA) LTD.

A Winter Holiday—




INDIA-CEYLON
by **P&O** P&O HOUSE (F.H. Grosvenor Manager)
14 COCKSPUR ST., LONDON, S.W.1
PICTURE HANDBOOK POST-FREE




THE TAJ MAHAL, AGRA

Visit INDIA

 INDIAN RAILWAYS

Information is obtainable from
The INDIAN RAILWAYS PUBLICITY BUREAUX
57, Haymarket, London
and 312, Madison Avenue, New York



BIRD & CO. : F. W. HEILGERS & CO.

Calcutta, Cawnpore, Lahore, Delhi, Rangoon, &c.

MANAGING AGENTS FOR

Jute Mills

The Auckland Jute Co., Ltd.
Clive Mills Co., Ltd.
Dalhousie Jute Co., Ltd.
Kinnison Jute Mills Co., Ltd.
Lawrence Jute Co., Ltd.
Lansdowne Jute Co., Ltd.
Naihati Jute Mills Co., Ltd.
Northbrook Jute Co., Ltd.
Standard Jute Co., Ltd.
Union Jute Co., Ltd.
Total Looms 8,215.

Coal Companies

The Burrakur Coal Co., Ltd.
Budroochuck Coal Mining Co., Ltd.
Standard Coal Co., Ltd.
Bhulanbararee Coal Co., Ltd.
Borrea Coal Co., Ltd.
Sendra Coal Co., Ltd.
Khas Jherria Colliery Co., Ltd.
Govindpore Coal Co., Ltd.
Ondal Coal Co., Ltd.
Raising Desharghur and Jherria
Selected and Grade 1 Coals.

COAL SALES.—Total over two million tons per annum to the State Railways, Steel Works, Mills, &c. Also Shipment and Bunker Coal to Colombo, Singapore, Bombay, Karachi, Madras, Rangoon, &c. The new Karanpura Coalfields are also now being developed and mined.

OTHER INDUSTRIES UNDER THE COMBINED MANAGEMENT EMBRACE :—

THE TITAGHUR PAPER MILLS CO., LTD.—There are two Mills (four machines in each) both modernised with electrical installations and latest Paper Mill Plant producing all qualities from the finest Printings and Writings down to Blottings. Total annual output nearly 20,000 tons.

KUMARDHUBI ENGINEERING WORKS, LTD., are situate in the centre of the Colliery district 140 miles from Calcutta and embrace Construction Shops modernised to cope with all large Bridge work and general Constructional work, including Colliery Plant. Also Foundry work and every form of General Engineering. This concern also caters for the supply of Turbines and Electric Plant, Aerial Ropeways, Cableways, Pumping Plant, &c.

KUMARDHUBI FIRECLAY AND SILICA WORKS, LTD., producing all kinds of Refractory Materials in both Fireclay and Silica for Steel Works, Coke Ovens, &c.

SIOUA JHERRIA ELECTRIC SUPPLY CO., LTD., is situate in the heart of the Coalfields area and linked up to a large group of important collieries. There are three Turbo-Alternator sets totalling 8,000 kw. capacity.

JUTE EXPORT.—A large export trade in private and general marks is conducted through the medium of R. Steel & Co., Ltd., and The Steel Baling Co., Ltd.

TEA CHESTS AND TIMBER.—Through, the Assam Saw Mills and Timber Co., Ltd., a large business is conducted in 3-ply chests for the Tea Gardens. The firm also carries out a large general business in Sleepers.

CONCRETE CONSTRUCTION.—In Indian Patent Stone work and in general Concrete Construction all descriptions of Ornamental and general building work are undertaken. Also the building of Concrete Bridges, Warehouses, Bungalows, &c.

LABOUR. The original business of Contractors for the supply of labour, which was the basis of the commencement of Bird & Co., still continues, and now embraces practically all the important Railways and Government organisations, &c., on the Eastern side of India.

LUBRICATING OIL.—Through the Coy. Silver-town Lubricants (India), Ltd., an important business is carried out in all grades of Oils and Greases with Railways and Industrial establishments.

LIMESTONE. The Bisra Stone Lime Co.'s Works are situated at Birmitrapur on the B.N. Railway, about 280 miles from Calcutta, and produces Limestone of very high quality. This stone is supplied at present at the rate of 50,000 tons a month to the principal Iron and Steel Works in India.

OTHER SPECIALISED DEPARTMENTS embrace Piece Goods, Iron and Manganese mining, Chartering and Steamer Agency business and all forms of General, Fire and Life Insurance.

LONDON
AGENTS :

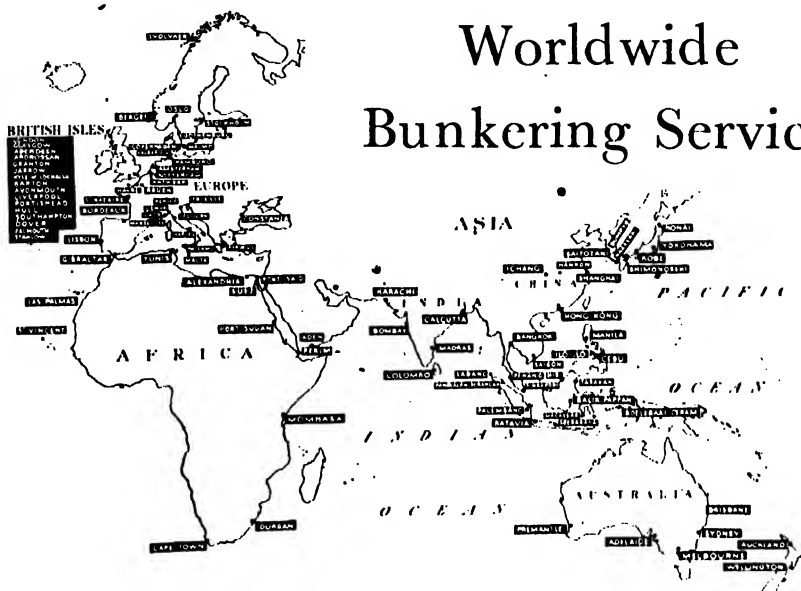
BIRD & CO. : F. W. HEILGERS & CO.

7. GRACECHURCH
STREET, E.C.3

Jute. Bunkering. Coal. Chartering.

OIL FUEL

Worldwide Bunkering Service



ASIATIC PETROLEUM CO., LTD.,
ST. HELEN'S COURT, GREAT ST. HELEN'S, LONDON, E.C.3.

Some advantages of OIL v. COAL FIRED VESSELS.

1. Reduced wage bill.
2. Less storage space for Fuel.
3. No smoke, soot or ashes.
4. No deterioration of Fuel.
5. Reduced Fuel handling charges.



Some advantages of MOTOR v. COAL FIRED VESSELS.

1. Reduced wage bill.
2. Low oil consumption.
3. Wide radius of action enabling cheapest bunkering.
4. Immediate starting, therefore minimum stand-by charges in port.
5. Increased cargo space.

THE EASTERN BANK L^{TD}.

HEAD OFFICE

CROSBY SQUARE, BISHOPSGATE, LONDON, E.C.3

<i>Subscribed Capital</i>	-	-	-	-	£2,000,000
<i>Paid-up Capital</i>	.	-	-	-	£1,000,000
<i>Reserve Fund</i>	-	-	-	-	£450,000
<i>Reserve Liability of Shareholders</i>		-	-	-	£1,000,000

BOARD OF DIRECTORS

Chairman

J. S. HASKELL, Esq.

Deputy Chairman

Sir JAMES LEIGH-WOOD, K.B.E., C.B., C.M.G.

J. H. BATTY, Esq.

G. BROMLEY-MARTIN, Esq.

EMILE FRANQUI, Esq. Sir PERCY WILSON NEWSON, Bt.

Sir THOMAS J. STRANGMAN.

BRANCHES

BOMBAY, CALCUTTA, KARACHI, MADRAS,

COLOMBO, SINGAPORE, BAGDAD,

AMARA, BAHREIN, BASRA, MOSUL, KIRKUK

The Bank issues Drafts, Telegraphic Transfers and Letters of Credit, purchases, grants advances against or collects Bills of Exchange, and transacts Banking and Agency Business in connection with the East.

Deposits are received for one year and for shorter periods at rates which can be ascertained on application. On current accounts Interest is allowed at 2 per cent. per annum on the minimum monthly balances.

F. H. SUTTON, Manager.

SEVEN GOOD REASONS WHY THE WORLD'S
ADVERTISERS INVARIABLY GIVE

The Statesman

India's Greatest Daily

THE FIRST PLACE IN THEIR EASTERN ALLOTMENTS

1. THE STATESMAN has by far the largest circulation—and the widest.
2. THE STATESMAN'S circulation is based on newspaper merit, without coupons or competitions.
3. THE STATESMAN is published in Calcutta, the London of the East, whose seaborne trade in the last fiscal year was nearly 53 millions sterling more than that of the next largest port (Bombay), and whose banks' clearances exceed by many millions sterling those of *the next six largest towns in India put together*.
4. THE STATESMAN has more exclusive selling agencies than any other Indian daily newspaper and is read all over India.
5. THE STATESMAN'S readers include the vast majority of Europeans and Indians interested in the buying and selling of imported goods.
6. THE STATESMAN is found in every club in India, and is read by members of all the Services—Civil and Military.
7. THE STATESMAN'S advertising rates are the HIGHEST IN INDIA and the CHEAPEST, because its "pulling power" is incomparably the most productive.

*For all information,
expert aid, specimen copies and rates, write to the leading Advertising Agencies
of Europe and America, or*

THE LONDON MANAGER

THE STATESMAN Office, 23-28, Fleet Street, E.C.4

MYSORE is one of the most advanced of the Indian States. Colonel His Highness Sir Sri Krishnaraja Wadiyar Bahadur, G.C.S.I., G.B.E., Maharaja of Mysore, is the ruler of the State, and the administration is conducted under His Highness's control by an executive Council consisting of the Dewan and three Members of Council. There are two constitutional bodies to assist in the work of administration, viz., the Representative Assembly and the Legislative Council.

The State is one of the largest of the Indian States, being the same size as Scotland, with an area of 29,475 square miles. The whole State is a tableland varying in elevation from 2,000 to 3,000 feet above sea level, with mountain ranges and peaks rising to 6,000 feet. The population is over six millions.

The Mysore country is famous for its picturesque and diversified scenery. The climate is temperate and many places in the State are regarded as Sanatoria.

Mysore is rich in mineral wealth. The Kolar Gold Fields extend over a range of 40 miles, and the total recovery of gold has been nearly 70 million pounds sterling since their inception. Other minerals that are worked on a commercial scale are Manganese, Chrome and Iron Ore, Magnesite, Asbestos, Corundum, and Mica.

The Forests, which cover an area of 3,300 square miles, contain many valuable and rare timbers and yield an annual revenue of over £300,000. The Sandalwood tree (*Santalum Album*) is a State monopoly. From the wood of this tree Sandalwood Oil is distilled in the Government Factories in Bangalore and Mysore. The oil is in great demand in America and Europe, and a limited quantity is also sold in Japan and in India itself.

Ninety per cent. of the population live by agriculture, but there are many important industries in the State, the principal industry being hand-loom weaving, with an annual output of over two million pounds sterling. Sericulture forms another important industry, the annual output of silk being worth £750,000 sterling, the total area under Mulberry exceeding 50,000 acres.

The Mysore Iron Works, situated at Bhadravati, are developing successfully. The plant occupies an area of more than 50 acres, and comprises a modern charcoal blast furnace with a wood distillation and by-product recovery plant, with auxiliary steam and power plants, and foundry and machine shops. A modern plant for the manufacture of cast iron pipes has recently been added.

Amongst other industrial concerns operated by State agency mention may be made of the Soap Factory, Weaving Factory, Arts and Crafts Institute, Lac Factory, Central Industrial Workshops and other Technical Institutes. The Chamrajendra Technical Institute in Mysore provides instruction and practical training for the youth of the country.

The wealth of the animal kingdom deserves special mention, Mysore being looked upon as a Sportsman's Paradise. There are wild elephants, bison, tigers,

panthers, leopards, bears, wild pig, wolves, hyenas, jackals, wild dogs, crocodiles, antelope, deer, and sambhur, besides a great variety of the smaller fauna. Small game is also abundant all over the State.

The Khedda operations for the capture of wild elephants are world-famous, a successful drive involving the capture of 70 wild elephants having been carried out in November last, whilst His Excellency the Viceroy was on a visit to Mysore as the guest of His Highness the Maharaja.

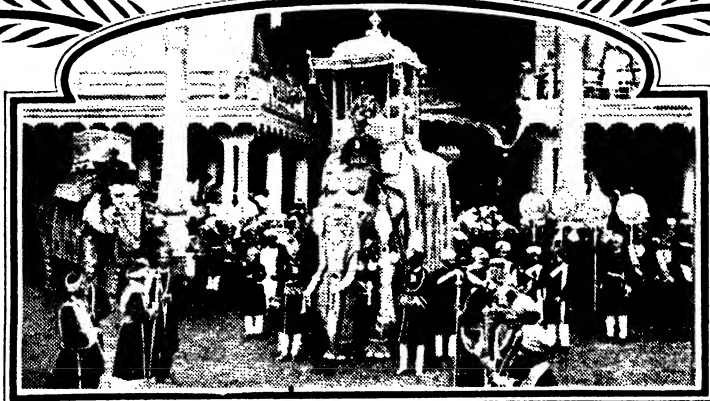
The Falls of the Cauvery, 400 feet in height, which present one of the choicest bits of scenery in the world, have been harnessed for the generation of electrical energy, power being supplied to the Kolar Gold Fields, situated 93 miles from the generating station. Bangalore, Mysore, and several other towns are also supplied. At the date of completion of this hydro-electric scheme, Mysore possessed the only long-distance transmission line in India, and at the same time one of the longest in the world. In order to protect this hydro-electric scheme, as well as to increase its scope and also provide irrigation for a large tract of country, the Krishnaraja Sagara Dam across the Cauvery River has recently been completed. The lake formed by this dam, which is over 40 square miles in waterspread, is one of the largest artificial lakes in the world. The main canal from this Reservoir has been named the "Irwin Canal" after the present Viceroy. Besides the Krishnaraja Sagara, special mention should be made of the Vani Vilas Sagara (Márikavé) Reservoir, covering an area of 32 square miles. On the date of completion of this reservoir, in 1910, it was the largest artificial lake in the world, both as regards waterspread and capacity.

The benefits derived from the storage of water for irrigation have been recognized from time immemorial, and there are now over 30,000 irrigation reservoirs, varying in size from mere ponds to irrigate a few acres to the magnificent Vani Vilas Sagara and Krishnaraja Sagara Reservoirs.

There is much to interest the traveller and student in architecture and sculpture. The Temples of Belur, Halebid and Somanathpur are famous examples of the Chalukya and Hoysala styles. The most remarkable specimen of sculpture is the colossal Jain statue of Gomatesvara at Sravanabelagola, 57 feet in height, carved out of the solid rock more than a thousand years ago. For grandeur nothing can surpass the Gersoppa or Jog Cataract, 960 feet in vertical height.

The State has an extensive system of Railways to all parts of the country. Roads are maintained in first-class condition. Fully equipped rest-houses for travellers are maintained in considerable numbers. There are good hotels in Bangalore and Mysore. The season for visiting the State is from July to March.

The Government of Mysore have recently opened an office in London in charge of the Trade Commissioner for Mysore. The sales of Sandalwood Oil and other products, as also the purchases to be made by the various departments in the State, are dealt with by the Trade Commissioner.

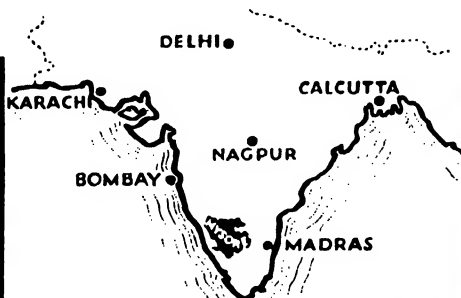


HIS HIGHNESS THE MAHARAJAH OF MYSORE ON HIS STATE ELEPHANT

MYSORE



CHAMUNDI
TEMPLE,
MYSORE



BOILER SHED, MYSORE SANDALWOOD OIL FACTORY



"JOG" FALLS,
960 FEET
IN HEIGHT

EASTWARDS — By F. A. Hook

Being the superficial observations of an occasional traveller on a journey through Ceylon and India, with twelve pen and ink illustrations by T. Raffles Davison. 5/- net.

“Mr. Hook in describing a three months’ trip which led him from London to Ceylon and Burma and back through India has written a most serviceable guide-book for intending travellers to the East.”—*The Times Literary Supplement.*

“The traveller who is considering a voyage to India may well plan his itinerary on the one which forms the linking thread in Mr. Hook’s narrative.”—*The Scotsman.*

SAIL

Volume II

The Romance of the Clipper Ships, by Spurling and Lubbock

Volume II, complete in itself, comprises 30 reproductions in colour facsimile on plate-marked paper of paintings of clipper ships by Mr. Jack Spurling, with a chapter on each by Mr. Basil Lubbock; a chapter on the *Torrens* by the late Joseph Conrad; a photogravure frontispiece (Spurling), “The Flying Squadron”; end papers by Mr. W. Birchall; indices by Commander A. T. Stewart, R.N.; a Chart of the sailing ship trade routes and five diagrams (Paasch) of masts, spars, sails, standing and running rigging. First Edition of Volume II is limited to 1,000 copies at £3/3/0 apiece. Postage, inland 1/-; abroad 3/-.

To Collectors: The remainder of fifty reserved copies of Volume II, signed by Artist and Author, is offered at £5/5/0 net apiece.

A third edition of Volume I “Sail” is in the press and will be published on April 1.

Illustrated prospectus, post free, may be had from
THE PUBLISHER, THE BLUE PETER
12, St. Mary Axe, London, E.C.3

VISITORS TO INDIA SHOULD TRAVEL

BY THE

Great Indian Peninsula Railway

INDIA'S GRAND TRUNK ROUTE FROM
BOMBAY TO NORTH, EAST AND SOUTH

Luxurious Trains
Express Speed
Excellent Service

FROM BOMBAY YOU MAY TAKE A PRIVATE
SALOON FOR YOUR ENTIRE TOUR THROUGH
INDIA OVER BROAD GAUGE RAILWAYS. A
VERITABLE "FLAT ON WHEELS," CONTAINING
BED, BATH AND DINING ROOMS, KITCHEN, &c.

APPLY TO THE

Chief Traffic Manager,
G.I.P. Railway,
Victoria Terminus, Bombay

ILLUSTRATED BOOKLETS & FULL INFORMATION FROM
THE MANAGER, INDIAN RAILWAYS BUREAU,
57, HAYMARKET, LONDON, W.1

THE NORTH WESTERN RAILWAY



YOU can now travel safely through the famous Khyber Pass to Landi Khana and see the route by which invading hordes have entered India from the north from the time of Alexander the Great and even earlier, and watch the camel caravans bringing in their wares from the centre of Asia, as they have done for many a century.

On your way to Peshawar and the Khyber Pass you can visit Amritsar, the famous city of the Sikhs, with its Golden Temple, Lahore, the capital of the Punjab, with its memories of the Moghul Emperors, and Taxilla, one of the old buried cities of India.

The North Western Railway is the only railway serving the Punjab, the North-West Frontier Province, Baluchistan and Sind, and with its 1,050 stations offers many excellent sites to advertisers for the display of enamel, plates and posters.

Full information can be obtained from the

PUBLICITY OFFICER

NORTH WESTERN RAILWAY
LAHORE, INDIA

and from the Manager

INDIAN RAILWAYS PUBLICITY BUREAU, 57, HAYMARKET, LONDON

The 3 that must be included in your Indian Travel Programme

DARJEELING, a comfortable night's journey from Calcutta, including 51 miles of mountain Railway, forming one of the most picturesque routes in the world, through dense forests and splendid mountain scenery. You should not fail to see the wonderful sight of the sunrise on MOUNT EVEREST from TIGER HILL.

SHILLONG, in the heart of the pine-clad Khasi Hills, is less than twenty-four hours' journey from Calcutta, terminating with a 60-mile motor-ride through tropical, sub-tropical and mountain scenery passing KAMAKHYA, one of the principal centres of Tantric worship in India.

- GAUR-PANDUAH—an ancient capital of Bengal, now easily accessible from Calcutta by rail—affords an opportunity to those who desire to see something of India's ancient cities, other than those usually visited by a tourist.

PARTICULARS FROM THE PUBLICITY OFFICER
EASTERN BENGAL RAILWAY

3, KOILA GHAT STREET, CALCUTTA

OR FROM THE MANAGER

INDIAN RAILWAYS PUBLICITY OFFICES

57, Haymarket, London, and 342, Madison Avenue, New York

South INDIA Calling

VISIT SOUTH INDIA

FAMOUS FOR ITS TEMPLES, FESTIVALS
AND PLACES OF HISTORIC INTEREST

NO tour in India is complete without a visit to the South, and travellers should either begin or end their journey at Colombo, and travel via the Indo-Ceylon route. New steamers have been provided for the short sea journey between Talaimannar in Ceylon and Dhanushkodi in India, and the trains run on to the piers alongside the steamers at both these places. Comfortable trains and excellent catering are provided on the South Indian Railway.

HALTS should be made at Madura to see the Meenakshi Temple, Tirumala's Palace and the Teppakulam; at Trichinopoly to see the Rock Temple and the Temple at Srirangam; at Tanjore to see the Temple, the Fort and the Palace; and at Madras, the chief City of the Madras Presidency. There are retiring and refreshment rooms at these stations.

If time permits there are many other places of interest in the plains which are well worth a visit. Ootacamund and Coonoor in the Nilgiri Hills, and Kodaikanal in the Palni Hills are noted for their climate, scenery and sport of all kinds; and the West Coast and its backwaters for beautiful scenery. In many places in South India excellent shooting, both big and small game, is obtainable.

Full particulars and booklets regarding tours can be obtained from the

CHIEF COMMERCIAL SUPERINTENDENT

PUBLICITY BRANCH

SOUTH INDIAN RAILWAY

TRICHINOPOLY

from any well-known travel agency, or the

SOUTH INDIAN RAILWAY ENQUIRY OFFICE, THE JETTY,
COLOMBO

Visit BURMA

*A Land of pagodas and of laughter,
for the Burmese are probably one of the happiest races
in the world.*

You will find all the comforts of civilization in Rangoon, the home of the famous Shwe Dagon Pagoda, and as you wander farther afield "on the road to Mandalay" you will pass through scenery unlike that in other parts of the world and come to King Thebaw's Palace with its quaint carvings and to the temple of the Thousand Pagodas. Farther on are the ruby mines, wonderful forests and strange peoples. A visit to Burma is well worth while; you will never regret it.

Full information can be obtained from the Traffic Manager,

BURMA RAILWAYS, RANGOON

or from the Managers,

INDIAN RAILWAYS PUBLICITY BUREAU

57, HAYMARKET, LONDON, and

342, MADISON AVENUE, NEW YORK

EAST INDIAN RAILWAY

For Tourist and Trader

FAST TRAIN SERVICES

TO

ALL SHOW CITIES

LUXURIOUS TOURIST CARS

AVAILABLE

AT ATTRACTIVE RATES

FOR ANY TOUR

The EAST INDIAN RAILWAY serves the
great PORT OF CALCUTTA and

offers unrivalled facilities to the
international trader

STATION ADVERTISING affords unlimited scope
and attracts the attention of over 76 million passengers
annually. Every assistance and advice given to manu-
facturers desirous of selecting factory sites in the great
industrial area served by the East Indian Railway.

RAILWAY FREIGHTS, ADVERTISING TERMS AND
OTHER INFORMATION ON APPLICATION TO

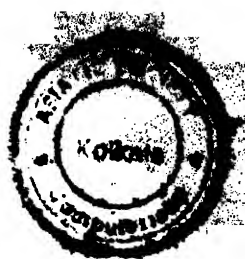
The Chief Commercial Manager,
RATES, DEVELOPMENT, AND PUBLICITY,

E. I. RAILWAY HOUSE, CALCUTTA

SIR C. C. GHOSE COLLECTION,
THE ASIATIC SOCIETY
CALCUTTA

PRINTED AND PUBLISHED
BY
THE TIMES PUBLISHING COMPANY
LIMITED
PRINTING HOUSE SQUARE
LONDON

SIR C. C. GHOSE COLLECTION.
THE



Library of the
ROYAL ASIATIC SOCIETY OF BENGAL
Call No. 915.4T.587
Shion No. 27613